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ABSTRACT

This report presents local convective boiling measurements in a micro-fin tube¹ for four pure refrigerants: R22, R32, R125, and R134a; and four refrigerant mixtures: R410B (R32/125, 45/55 % mass), R32/R134a (27/73 % and 30/70 % mass) and, R407C (R32/125/134a, 25/23/52 % mass). Flow boiling heat transfer coefficients for the mixtures' pure components and R22 were measured to establish a baseline for the heat transfer degradation calculations. The measured convective boiling Nusselt numbers for all of the test refrigerants were correlated to a single expression consisting of a product of dimensionless properties. The correlation was shown to predict some existing data from the literature within 20 %. The degradation in heat transfer performance of the mixtures was found to range from 1 % to 50 % for all refrigerants tested.

Keywords: Enhanced heat transfer, micro-fin, refrigerant mixtures, fluid heating, boiling

¹ Certain trade names and company products are mentioned in the text or identified in an illustration in order to adequately specify the experimental procedure and equipment used. In no case does such an identification imply recommendation or endorsement by the National Institute of Standards and Technology, nor does it imply that the products are necessarily the best available for the purpose.

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INTRODUCTION

Most evaporators and condensers of new unitary refrigeration and air-conditioning equipment are manufactured with micro-fin tubes. The micro-fin tube dominates unitary equipment design because it provides the highest heat transfer with the lowest pressure drop of the commercially available internal enhancements (Webb, 1994). Together, R134a, R22, and R22 replacements constitute by mass nearly all the refrigerants used in unitary products (Muir, 1989). Consequently, two phase heat transfer data for the micro-fin tube with R134a, R22, and R22 replacements are essential for the design of evaporators and condensers for unitary applications.

Experimental flow boiling studies of pure and mixed refrigerant have been conducted in recent years and are well documented in the state of the art review by Thome (1996). Pure fluids in smooth tubes have been well studied and their heat transfer characteristics are reliably predicted. However, Thome (1996) calls for an improvement in the prediction methodologies for mixed refrigerant flow boiling heat transfer.

Jung et al. (2003) conducted a study of mixtures composed of R32, R125 and R134a in a smooth horizontal tube using a cartridge heater to generate uniform heat flux. For non-azeotropic mixtures, they found significant reductions in heat transfer coefficient compared to ideal values. Additionally, they developed satisfactory correlations to predict heat transfer performance. Later, Jung et al. (2004) studied three different microfin configurations but used pure refrigerants. This was done primarily to contrast the enhancement techniques rather than to develop correlations useful in predicting heat transfer performance. In both studies, global rather than local heat transfer coefficients were calculated.

Yun et al. (2002) examined existing experimental data and developed a model, which included a ratio of film thickness to fin height, to predict micro-fin heat transfer enhancement. This model assumed that smooth tube heat transfer performance could be accurately predicted and needs to be validated over a wide range of refrigerants and micro-fin geometries.

The present study provides measured local flow boiling heat transfer for both pure and mixed refrigerants in a micro-fin tube. The overall objective of the effort was to produce a reliable flow boiling correlation for pure refrigerants and mixtures in commercially available micro-fin tubes. A single heat transfer correlation based on the hydraulic diameter concept was developed to predict both mixed and pure refrigerants. A single correlation can be conveniently used to compare mixed refrigerant and pure refrigerant heat transfer performances for design evaluation.

EXPERIMENTAL APPARATUS

Figure 1 shows a sketch of the experimental apparatus used to establish and measure the convective boiling. The refrigerant flow rate, pressure, and superheat were fixed at the inlet to the test section. The water flow rate and the inlet temperature were fixed to establish the overall refrigerant quality change in the test section. The water temperature drop, the tube wall temperature, the refrigerant temperatures, pressures, and pressure drops were measured at several axial locations along the test section. These measurements were used to calculate the local heat-transfer coefficient for the

micro-fin tube.

The test section consisted of a pair of 3.34 m long, horizontal tubes connected by a U-bend. A fixed test pressure was maintained by balancing the refrigerant duty between the subcooler, the test section, and the evaporator. A magnetically coupled gear pump delivered the test refrigerant to the entrance of the test section with a few degrees of vapor superheat. Another magnetically coupled gear pump supplied a steady flow of water to the annulus of the test section. The inlet temperature of the water loop was held constant for each test with a water chilled heat exchanger and variable electric heaters. The refrigerant and water flow rates were controlled by varying the pump speeds using frequency inverters. Redundant flow rate measurements were made with Coriolis flowmeters and with turbine flowmeters for both the refrigerant and water sides.

Figure 2 shows a cross section of the test section with a detail of the micro-fin tube geometry. The test refrigerant flowed inside a micro-fin tube, while distilled water flowed counterflow to the refrigerant in the annulus that surrounded the micro-fin tube. The annulus gap was 2.2 mm, and the micro-fin tube wall thickness was 0.3 mm. The micro fin tube had 60, 0.2 mm high fins with 18 degree helix angle. For this geometry, the cross sectional flow area was 60.8 mm^2 giving an equivalent smooth diameter (D_e) of 8.8 mm. The root diameter of the micro-fin tube was 8.91 mm. The inside-surface area per unit length of the tube was estimated to be 44.6 mm. The hydraulic diameter (D_h) of the micro-fin tube was estimated to be 5.45 mm. The ratio of the inner surface area of the micro fin tube to the surface area of a smooth tube of the same D_e was 1.6. The fins rifled down the axis of the tube at a helix angle of 18° with respect to the tube axis.

Figure 3 provides a detailed description of the test section. The annulus was constructed by connecting a series of tubes with 14 pairs of stainless steel flanges. This construction permitted the measurement of both the outer micro-fin wall temperature and the water temperature drop as discussed in the following two paragraphs. The design also avoided abrupt discontinuities such as unheated portions of the test section and tube-wall "fins" between thermopile ends.

Figure 3 shows that thermocouple wires pass between 12 of the gasketed flange pairs to measure the refrigerant-tube wall temperature at ten locations on the top, side, and bottom of the tube wall. These locations were separated by 0.6 m on average, and they were located near the intersection of the shell flanges. In addition to these, thermocouples were also mounted next to the pressure taps near the middle of each test section length. The thermocouple junction was soldered to the outside surface and was sanded to a thickness of 0.5 mm. The leads were strapped to a thin non-electrically-conducting epoxy layer on the wall for a distance of 14.3 mm before they passed between a pair of the shell flanges. The wall temperature was corrected for a heat flux dependent fin effect. The correction was typically 0.05 K. Figure 3 also shows that a chain of thermopiles was used to measure the water temperature drop between each flange location. Each thermopile consisted of ten thermocouples in series, with the ten junctions at each end evenly spaced around the circumference of the annulus. Because the upstream junctions of one thermopile and the downstream junctions of another enter the annulus at the same axial location (except at the water inlet and outlet), the junctions of the adjacent piles were alternated around the circumference. A

series of Teflon half-rings attached to the inner refrigerant tube centered the tube in the annulus. The half-rings were circumferentially baffled to mix the water flow. Mixing was further ensured by a high water Reynolds number (Kattan et al. 1995).

As shown in Fig. 3, six refrigerant pressure taps along the test section allowed the measurement of the upstream absolute pressure and five pressure drops along the test section. Two sets of two water pressure taps were used to measure the water pressure drop along each tube. Also, a sheathed thermocouple measured the refrigerant temperature at each end of the two refrigerant tubes, with the junction of each centered radially. Only the thermocouple at the inlet of the first tube was used in the calculations. The entire test section was wrapped with 5 cm of foam insulation to minimize heat transfer between the water and the ambient.

HEAT TRANSFER COEFFICIENTS

Table 1 shows the expanded measurement uncertainty (U) of the various measurements along with the range of each parameter in this study. The U was estimated with the law of propagation of uncertainty. All expanded measurement uncertainties are reported at the 95 % confidence level. The estimates shown in Table 1 are median values of U for the correlated data. All saturated refrigerant properties were evaluated at the measured saturation pressure with the REFPROP (Lemmon et al. 2003) equation of state.

The convective boiling heat transfer coefficient based on the actual inner surface area ($h_{2\phi}$) was calculated as:

$$h_{2\phi} = \frac{q''}{T_w - T_r} \quad (1)$$

where the measured wall temperatures (T_w) were fitted to their axial position to reduce the uncertainty in the measurement. The measured wall temperatures were fitted to:

$$T_w = A_0 + A_1 z + A_2 z^2 \quad (2)$$

Figure 4 shows the estimated expanded uncertainty of the wall temperature fit for all the measurements as a function of thermodynamic quality. Figure 4 includes some data that was omitted from the correlation as explained in the Results section. The uncertainty of most of the fitted wall temperatures was less than 0.5 K at the 95 % confidence level. The median of the uncertainty in T_w as shown in Table 1 was 0.25 K.

The water temperature (T_f) was determined from the measured temperature change obtained from each thermopile and the inlet water temperature measurement. The water temperature was regressed to the axial location of the thermopiles along the z -coordinate (see Fig. 3). The water temperatures were fitted to:

$$T_f = A_0 + A_1 z + A_2 z^2 + A_3 z^3 \quad (1)$$

The water temperature fits, the measured water mass flow rate (\dot{m}_f), and the properties of the water were used to calculate the local heat flux (q'') to the micro-fin tube based on the actual inner surface area:²

$$q'' = \frac{\dot{m}_f}{p} \left(c_{pf} \frac{dT_f}{dz} + v_f \frac{dP_f}{dz} \right) \quad (2)$$

where p is the wetted perimeter of the inside of the micro-fin tube. The specific heat (c_{pf}) and the specific volume (v_f) of the water were calculated locally as a function of the water temperature. The local, axial water temperature gradient (dT_f/dz) was calculated from a derivative of eq. (1). The water pressure gradient (dP_f/dz) was linearly interpolated between the pressure taps to the location of the wall thermocouples. The pressure gradient term was typically less than 3 % of the temperature gradient term. For thermodynamic qualities greater than 10 %, the uncertainty of the heat flux was approximately ± 5 % of the measured value.

Figure 5 shows an example plot of the local heat flux as calculated from eq. (2) versus thermodynamic quality. This heat flux profile is for R22 at a Reynolds number of 7800 and a refrigerant pressure of 600 kPa.

Figure 6 plots the relative uncertainty in the water temperature gradient (which is roughly equal to the uncertainty in the heat flux) versus thermodynamic quality. As shown in Fig. 6, the larger values of heat flux exhibit smaller relative uncertainties than the lower heat fluxes.

The equilibrium refrigerant temperature (T_r) and all other thermodynamic and transport properties were calculated with version 7.1 of REFPROP (Lemmon et al., 2003) while using enthalpy and pressure as inputs. The enthalpy of the refrigerant vapor at the inlet of the test section was calculated from its measured temperature and pressure. The subsequent drop in refrigerant enthalpy along the test section was calculated from the local heat flux and the measured refrigerant mass flow rate. The refrigerant pressures were measured at six pressure taps along the test section. The pressure was linearly interpolated between the taps. The average T_r was varied between 1 °C and 3 °C with approximately 5 K of subcooling at the test section inlet.

Figure 7 illustrates the results of the above-described measurement procedure. The appearances of

² See eq. (8).

the profiles for water and wall temperature illustrate the need for separate regression forms.

The local Nusselt number (Nu) was calculated using the hydraulic diameter and the heat transfer coefficient based on the actual inner surface area of the tube as:

$$Nu = \frac{h_{2\phi} D_h}{k_l} \quad (3)$$

The hydraulic diameter was measured with a polar planimeter from a scaled drawing of the tube cross section but it can be approximated for other tube geometries with fin parameters by expanding on the expression that was given for D_h in Kedzierski and Goncalves (1999):

$$D_h = \frac{4A_c \cos \alpha}{N_f S} = \frac{(\pi D_r^2 - 2N_f t_b e) \cos \alpha}{s + \frac{2e}{\cos(\beta/2)}} \quad (4)$$

Figure 2 shows the fin parameters that are used in eq. (6) where S is the perimeter of one fin and channel taken perpendicular to the axis of the fin, s is the spacing between the fins, β is the fin-tip angle, e is the fin height, α is the twist angle of the fins, t_b is the thickness of the fin at its base, N_f is the total number of fins, and D_r is the diameter of the tube at the fin root, i.e., fin base. The hydraulic diameter of the present tube geometry of this study as estimated from eq. (6) is 5.2 mm, while that obtained from the planimeter and used in the data reduction was 5.45 mm.

The internal surface area of the fin per unit length (A_i/L) can be estimated from:

$$\frac{A_i}{L} = N_f \left(\frac{s}{\cos \alpha} + \frac{2e}{\cos \alpha \cos(\beta/2)} \right) \quad (5)$$

The A_i/L estimated from eq. (7) is 46.8 mm, while that obtained from the planimeter and used in the data reduction was 44.6 mm.

Figure 8 shows the relative uncertainty of the Nu versus thermodynamic quality. The average uncertainty of Nu for qualities greater than 10 % was approximately ± 15 %. For qualities less than 10 %, the average uncertainty of Nu was approximately ± 30 %. Measurements of Nu with uncertainties greater than 50 % were omitted from the regression.

RESULTS

The 6360 data points generated in this study for R22, R134a, R32, R125, R410B, R407C and R32/R134a are tabulated in two separate appendices. Appendix A contains the Nusselt and Reynolds numbers and other reduced data that were used in the correlation of the data. Appendix B

contains the raw data measurements including the heat flux and the wall and water temperatures and locations. The column entitled, "flow," provides a "C" to show that all the data was for counterflow. All the parameters are defined in the nomenclature.

Heat Transfer

The convective boiling Nusselt numbers (Nu) were correlated following the law of Corresponding States philosophy presented by Cooper (1984). Cooper (1984) suggested that the fluid properties that govern nucleate pool boiling can be well represented by a product of the reduced pressure (P_r/P_c), the acentric factor ($-\log_{10}(P_r/P_c)$), and other dimensionless variables to various powers. The above reduced pressure terms and several other locally evaluated terms were used to correlate the local Nu measurements for all boiling flow conditions and refrigerants in this study to:

$$\text{Nu} = 482.18 \text{Re}^{0.3} \text{Pr}^{C_1} \left(\frac{P_r}{P_c} \right)^{C_2} \text{Bo}^{C_3} \left(-\log_{10} \frac{P_r}{P_c} \right)^{C_4} M_w^{C_5} 1.1^{C_6} \quad (6)$$

where

$$C_1 = 0.51x_q$$

$$C_2 = 5.57x_q - 5.21x_q^2$$

$$C_3 = 0.54 - 1.56x_q + 1.42x_q^2$$

$$C_4 = -0.81 + 12.56x_q - 11.00x_q^2$$

$$C_5 = 0.25 - 0.035x_q^2$$

$$C_6 = \frac{(T_{LV} - T_{MV}) \{ 279.8(x_v - x_l) - 4298(T_d - T_b)/T_s \}}{T_s}$$

The limits of applicability for the correlation are:

$$70 \leq G_r \leq 370 \text{ kg/m}^2\text{s}$$

and

$$0 \leq x_q \leq 0.7$$

In this correlation, the all-liquid Reynolds number (Re), the Boiling number (Bo), the liquid Prandtl number (Pr), the reduced pressure (P_r/P_c), and the quality (x_q) are all evaluated locally at the saturation temperature. The all-liquid Reynolds number and the Nusselt number are based on hydraulic diameter. The Nusselt number is also based on the actual inner surface area of the tube. The T_d and the T_b are the dew point temperature and the bubble point temperature of the mixture, respectively, evaluated at the local saturated pressure and overall composition. The T_{LV} and the

T_{MV} are the temperatures of the least volatile component and the most volatile component evaluated at the saturated pressure of the mixture, respectively. The mass fraction of the vapor (x_v) and that of the liquid (x_l) are evaluated at the saturation pressure and the local thermodynamic quality, while the overall composition is the all liquid or all vapor value. The constant C_6 is zero for pure refrigerants.

The search for the above form of the correlation began with quadratic exponents in quality for each dimensionless variable. The quadratic exponent form was used with good results by Kedzierski and Kim (1997) to correlate several other pure refrigerants and mixtures for a wide range of qualities for both evaporative and condensing flows. The number of dimensionless variables and constants in the exponents were reduced to only those with significant influence on the residual standard deviation of the fit. For example, because R410B is a near-azeotrope, the composition difference between vapor and liquid phases had a negligible influence on the fit of the correlation. Consequently, the composition difference was not used in the fit of the R410B data.

Not all of the 6360 data points were used in the regression of eq. (6). Table 2 shows the number of data points for each refrigerant that were not used in the fit. Measurements with large uncertainties, and measurements that had high influence, or high leverage on the model were all candidates for exclusion from the regression (Belsley et al., 1980). Most of the data that satisfied the last two criteria were data at or near the inlet and exit of the test section. There were nearly as many outliers at the inlet as there were for the outlet of the test section. Outliers at the inlet and outlet of the test section are consistent with the largest uncertainties in the water and wall temperature fits being located at the inlet and outlet. Also, the ΔT_s can be less than the uncertainty of the measurement at the refrigerant inlet of the test section.

Figures 9 and 10 provide a comparison between the boiling Nusselt numbers predicted with eq. (6) for the micro-fin tube to those measured for pure and mixed refrigerants, respectively. Equation (6) correlates 95 % of the pure component and near-azeotropic convective boiling Nusselt numbers to within approximately ± 9 %. The mean of the correlation has an average uncertainty of ± 3 % over the entire range of Nusselt numbers. Only random trends were observed in the residual plots against each of the parameters of eq. (6). The residual standard deviation of eq. (6) and that for the separate fits for each fluid were nearly the same. This suggests that the scatter in the data is not caused by the different fluids.

Figure 11 shows the heat transfer coefficient versus quality for each of the seven test fluids at $T_r = 278$ K, $q'' = (48x_q + 3)$ kW/m² and $G_r = 250$ kg/(m²·s). The heat flux relationship was based on a linear fit of experimental data for one test run, but represents most of the data. The solid lines are predictions for the present micro-fin tube geometry, which were obtained from the correlation of the data given as eq. (8). In general, the measured boiling heat-transfer coefficient rapidly increases for increasing qualities within the ranges tested. This is expected as the refrigerants absorb larger quantities of heat during vaporization. No fall off in heat transfer coefficient is seen indicating partial dryout was likely not achieved. The level of refrigerant performance appears to be loosely tied to the latent heat of vaporization for each fluid particularly at higher quality. The refrigerant

R32 exhibits the highest heat transfer performance of the eight test fluids due to its high thermal conductivity and latent heat of vaporization. As expected, the performance of the near-azeotropic mixture R410B is between that of its pure components R32 and R125. The predicted performance of R22 is actually lower than that of its proposed replacement R410B. The flow boiling performance of R125 is greater than that of R134a for lower qualities but drops off as quality exceeds 0.3 likely due to its lower latent heat of vaporization.

Over 140 figures would be required to depict the Nusselt number versus thermodynamic quality relationships for each test. Consequently, only representative plots of Nu versus x_q are given in Figs. 12 through 18. The solid lines are predictions for the present micro-fin tube geometry, which were obtained from the correlation of the data given as eq. (6). The symbols are the measured data points. In general, the predictions slightly under-predict the measured counterflow Nusselt numbers.

Figure 19 compares the predictions of eq. (6) to local boiling heat transfer data from the literature. The studies used for comparison are listed in Table 3. Most of the heat transfer coefficients provided in the literature were based on the micro-fin tube equivalent diameter or the root-diameter. In this case, the provided area ratio or eq. (7) was used to adjust the heat transfer coefficients from the literature so that they were based on the actual inner surface area of the tube and thus consistent with eq. (8). Additionally, Nusselt numbers were calculated using the hydraulic diameter of the micro-fin tube, which was estimated from eq. (6). As shown in Fig. 19, most of the measured Nusselt numbers lie with $\pm 20\%$ of the predictions. In general, the correlation over predicted Nusselt number for the studies using cartridge heating and under predicted Nusselt number when fluid heating was used. No trend was seen for pure refrigerants versus mixtures.

The data from the literature are all within the mass velocity limits for which the correlation was developed. Also, the e/D_i ratios for the tubes from the literature are approximately equivalent to the present tube (0.02). However, considering the wide range of tube diameters, helix angles, fluids, fin shapes, and estimates made for the literature data, the agreement between eq. (6) and Nusselt numbers from the literature is remarkably good.

Surprisingly, even the data of Chamra and Webb (1995) were predicted fairly well by the correlation despite the additional heat transfer enhancement created by their cross-grooved micro-fin configuration. This may be due to the fact that the correlation includes parameters based on hydraulic diameter, which may account for the three dimensional configuration features.

Figure 20 shows the heat transfer degradation (ΔNu_d) as a function of the thermodynamic quality for four different refrigerant mixtures at a mass flux of $250 \text{ kg/m}^2 \text{ s}$. The ΔNu_d was calculated from the correlation using the following definition for a given composition:

$$\Delta Nu_d = 100(Nu_p - Nu_m) / Nu_p = 100(1 - 1.1^{C_6}) \quad (7)$$

where Nu_p is the Nusselt number obtained from the single component correlation using the mixture properties, while Nu_m is the Nusselt number obtained from the mixture correlation. Equation 9 quantifies the degradation due to mass transfer resistance and concentration gradients. That is to say, no effects of mixture properties are predicted by eq. 9 given that the mixture properties are used in the single component correlation (Kedzierski et al., 1992). As a result, R410B exhibited essentially no degradation due to concentration gradients given that it is a near azeotrope. In contrast, the zeotrope, R407C, gave a heat transfer degradation of nearly 50 %, which was independent of quality. The remaining two zeotropic mixtures of R32 and R134a showed a slight increase in degradation (from 35 % to 40 %) with respect to quality.

CONCLUSIONS

Local convective boiling measurements for four pure refrigerants and four refrigerant mixtures in a fluid heated micro-fin tube were presented. The measured convective boiling Nusselt numbers for all of the test refrigerants were correlated to a single expression consisting of a product of dimensionless properties. The correlation was shown to predict measured boiling Nusselt numbers for various micro-fin configurations within 20 %.

In general, the measured boiling heat-transfer coefficient increased with increasing qualities. The refrigerant R32 exhibited the highest heat transfer performance due to its high thermal conductivity and latent heat of vaporization. As expected, the performance of the near-azeotropic mixture R410B was between that of its pure components R32 and R125.

Finally, the heat transfer degradation of the refrigerant mixtures was evaluated. The heat transfer degradation associated with R410B was shown to be relatively small while the degradation of R32/134a and R407C approached 40 % and 50 % respectively.

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NOMENCLATURE

English symbols

A_c	cross sectional flow area inside tube (m^2)
A_o	coefficients given in eq. (2)
A_i	actual inner surface area of tube (m^2)
A_r	ratio of actual inner surface area of micro-fin tube to that of a smooth tube of inner diameter D_r
Bo	local boiling number, $\frac{q''}{G_r i_{fg}}$
c_p	specific heat ($J/kg \cdot K$)
C	coefficients given in eq. (8)
D	tube diameter (m)
D_e	equivalent inner diameter of smooth tube, $\sqrt{\frac{4A_c}{\pi}}$ (m)
D_h	hydraulic diameter of micro-fin tube (m)
e	fin height (m)
E_h	heat-transfer enhancement ratio given in Appendix: $E_h = \frac{h_{2\phi} A_i}{h_f \pi D_e L}$
G	total mass velocity ($kg/m^2 \cdot s$)
$h_{2\phi}$	local two-phase heat-transfer coefficient ($W/m^2 \cdot K$)
i_{fg}	latent heat of vaporization (J/kg)
k	refrigerant thermal conductivity ($W/m \cdot K$)
L	tube length (m)
Nu	local Nusselt number based on D_h
N_f	number of fins
\dot{m}	mass flow rate (kg/s)
M_w	molecular weight ($g/mole$)
p	wetted perimeter (m)
P	local fluid pressure (Pa)
Pr	liquid refrigerant Prandtl number $\left. \frac{c_p \mu}{k} \right _{r,l}$
q''	local heat flux based on A_i (W/m^2)
Re	all liquid, refrigerant Reynolds number based on $D_h = \frac{G_r D_h}{\mu_{r,l}}$
s	spacing between the fins (m)
S	perimeter of one fin and channel (m)
S_v	non-dimensional refrigerant specific volume given in Appendix: $\frac{v_v - v_l}{v}$
t_b	thickness of the fin at its base (m)
t_w	thickness of the tube wall (m)

T	temperature (K)
T_b	bubble point temperature of mixture, eq. (6) (K)
T_d	dew point temperature of mixture, eq. (6) (K)
U	expanded relative uncertainty
x_q	thermodynamic mass quality
z	axial distance (m)

Greek symbols

α	helix angle between micro fin and tube axis
β	fin-tip angle (rad)
$\Delta h_{2\delta}$	heat transfer degradation ($\text{W/m}^2 \cdot \text{K}$)
ΔT_s	$T_s - T_w$ (K)
ΔNu_d	defined in eq. (7)
ν	specific volume, $x_q \nu_v + (1-x_q) \nu_l$ (m^3/kg)

Subscripts

b	bulk condition, fin base
c	critical condition
f	water
i	inlet, inner
l	liquid
LV	least volatile component
m	measured
MV	more volatile component
p	plain or smooth tube, predicted
r	refrigerant
s	saturated state
w	heat transfer surface
v	vapor

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Table 1 Median estimated 95 % relative expanded uncertainties for measurements

Parameter	Minimum	Maximum	U %
G_r [kg/m ² ·s]	57	552	2.0
T_r [K]	288.0	323.0	0.1 (0.3 K)
P [kPa]	600	2000	1.5
T_w [K]	288.0	313.0	0.1 (0.25 K)
\dot{m}_f [kg/s]	0.0150	0.0450	2.0
T_f [K]	278.0	313.0	0.1
P_f [kPa]	200	110	1.5
q'' [kW/m ²]	1.5	43.8	5.1
dT_f/dz [K/m]	0.009	0.45	5.2
Nu	78	530	16.4
Re	5300	16500	4.0
Bo	.000016	.00055	16.0
Pr	1.8	3.8	2.0
P_f/P_c	0.08	0.22	2.0
x_q	0.001	.72	3.1
ΔT_s [K]	0.8	6.0	15.2 (0.44 K)

Table 2 Data distribution

	R32/134a	R407C	R410B	R134a	R125	R32	R22	Total
# tests	57	60	58	70	64	97	124	530
# points	684	720	696	840	768	1164	1488	6360
# pts used in fit	1950			3513				5463

Table 3 Studies used for comparison

Study	Fluid	D_i (mm)	N_f	helix angle, α (deg)	Heat source	A_r
Nidegger et al (1997)	R134a	11.90	70	18	water	1.74
Zurcher et al (1997)	R407C	11.90	70	18	water	1.74
Kim et al (2002)	R410A	8.92	60	25	cartridge	1.44
Seo and Kim (2000)	R22	8.92	60	25	cartridge	1.44
Chamra and Webb (1995)	R22	14.66	74	+15/-15	water	1.61

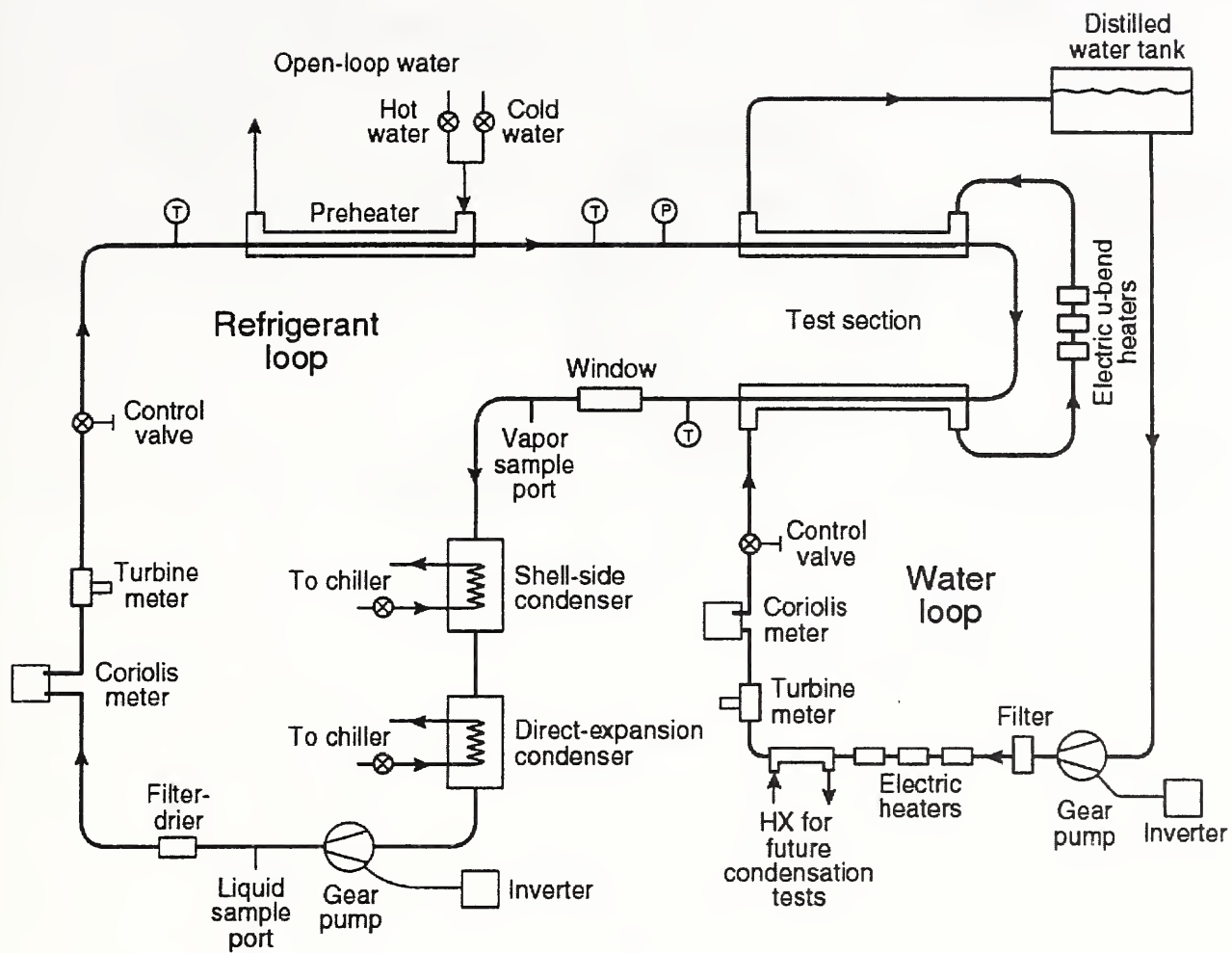


Figure 1 Schematic of test rig

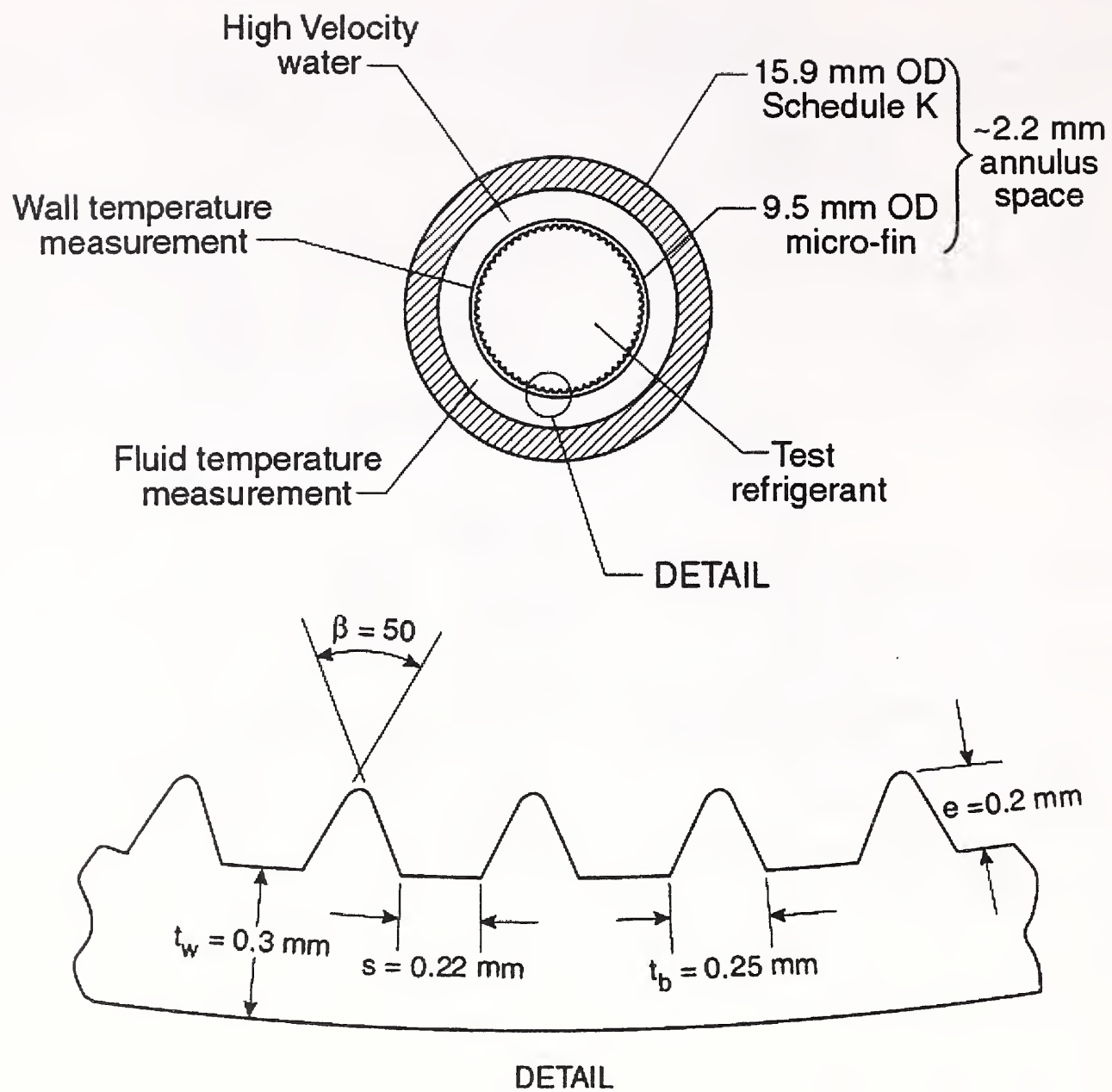


Figure 2 Test section cross section

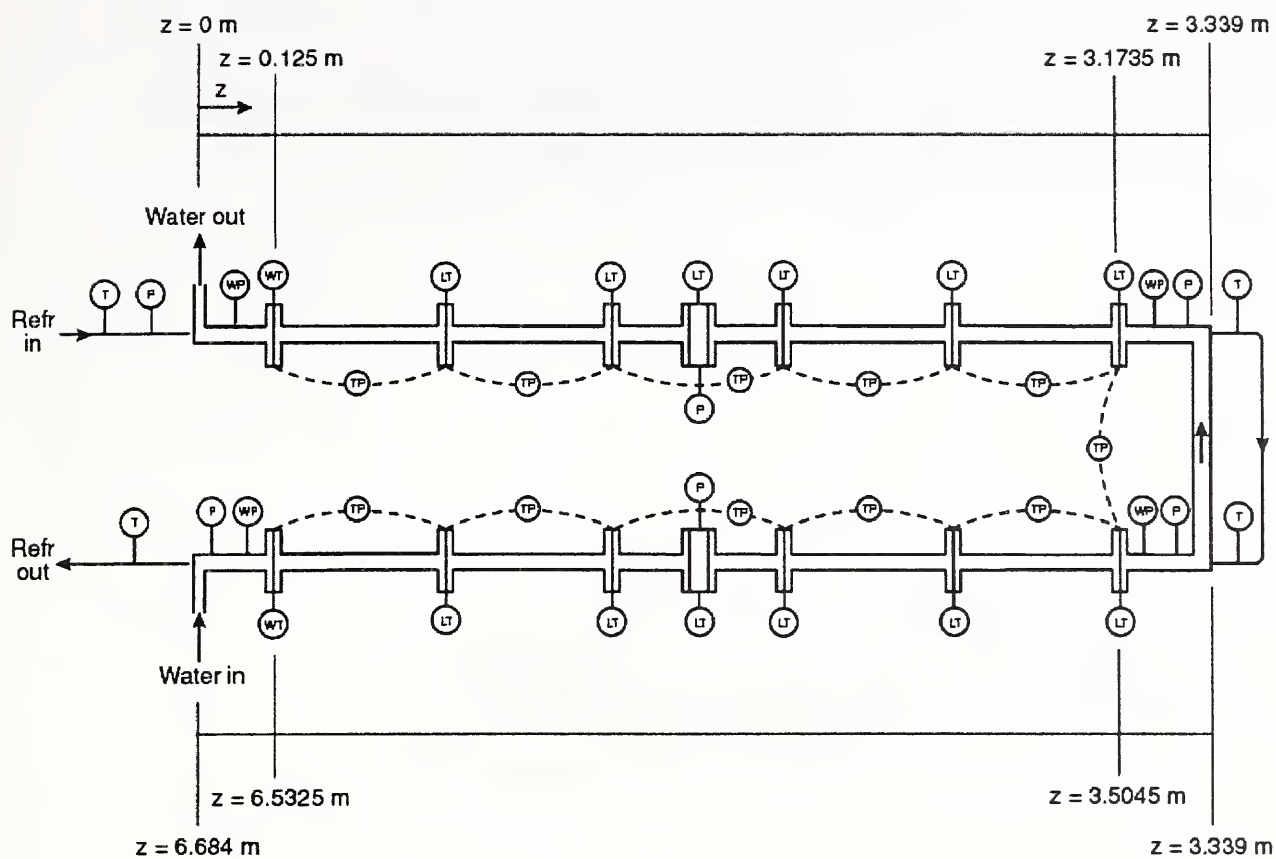


Figure 3 Detailed schematic of test section

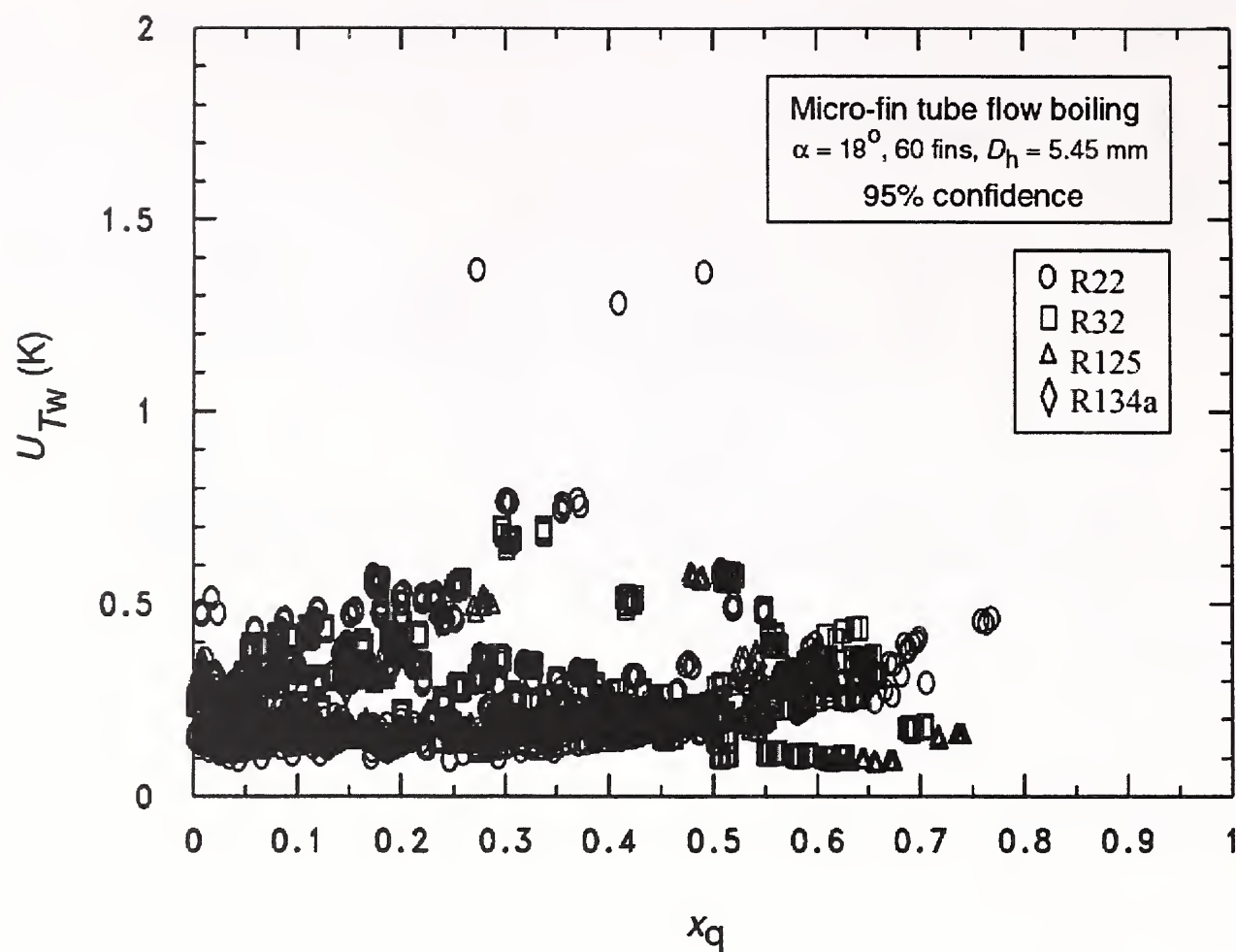


Figure 4 Relative uncertainty of inner wall temperature

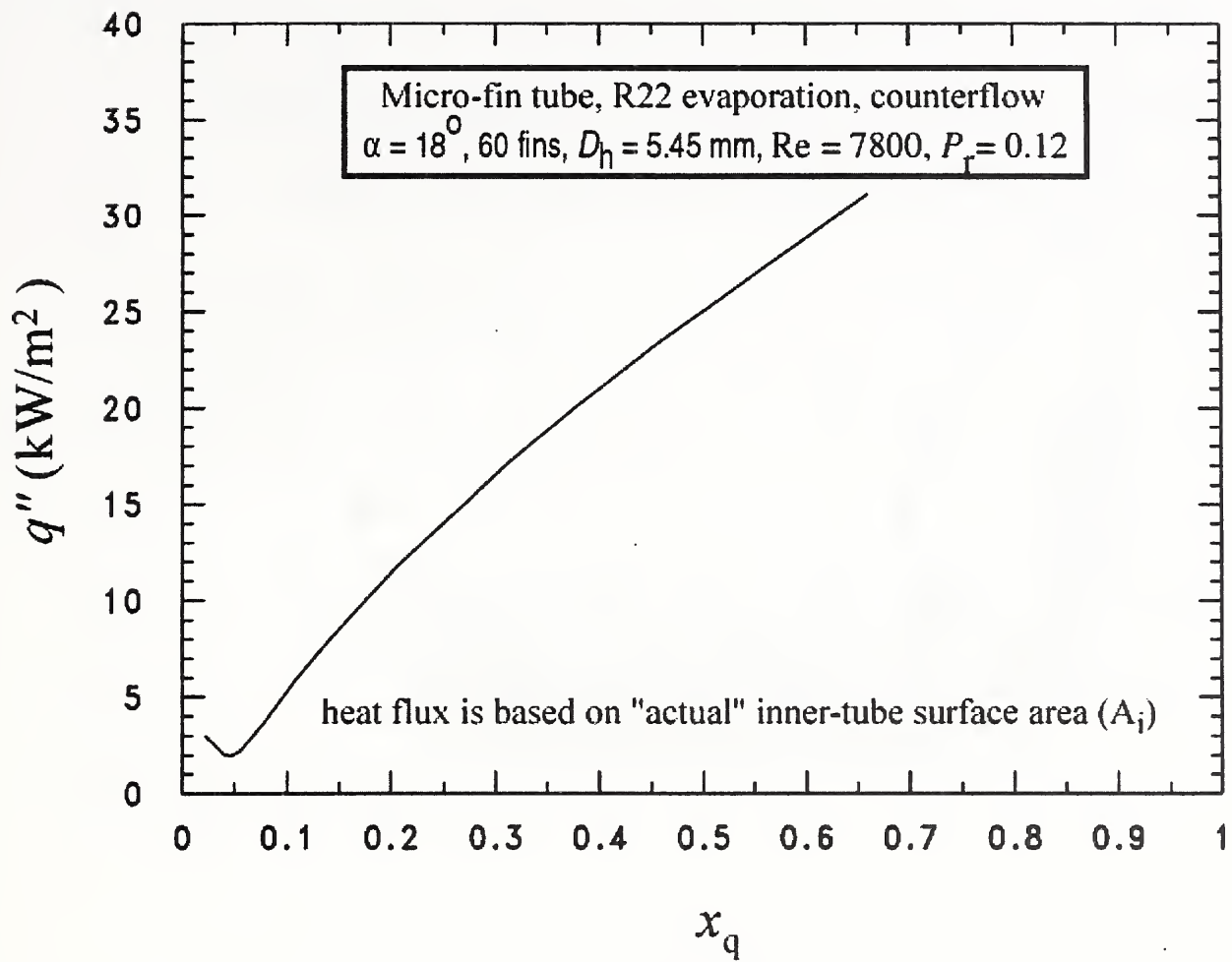


Figure 5 Heat Flux distribution for R22

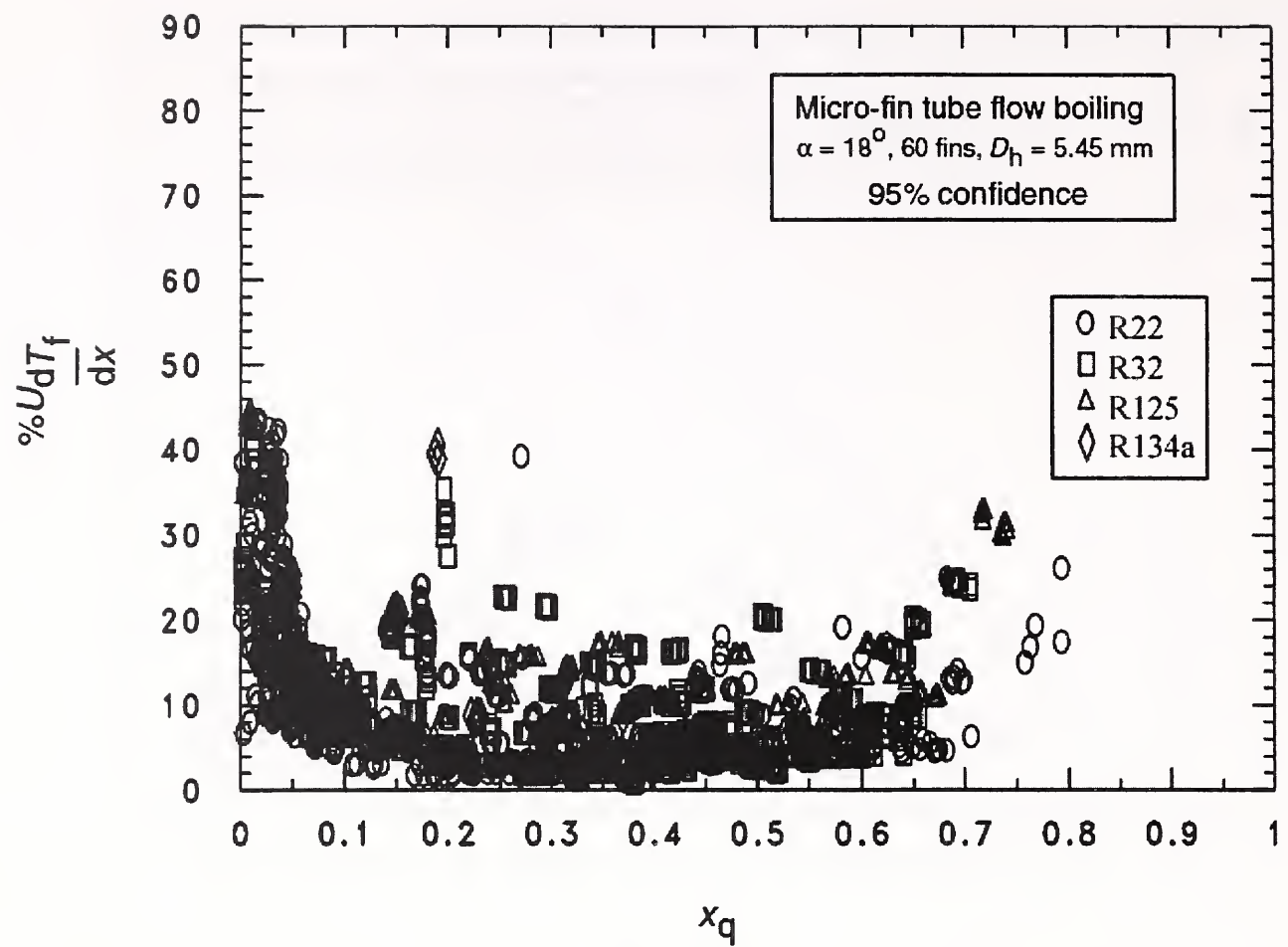


Figure 6 Relative uncertainty of water temperature gradient with respect to quality

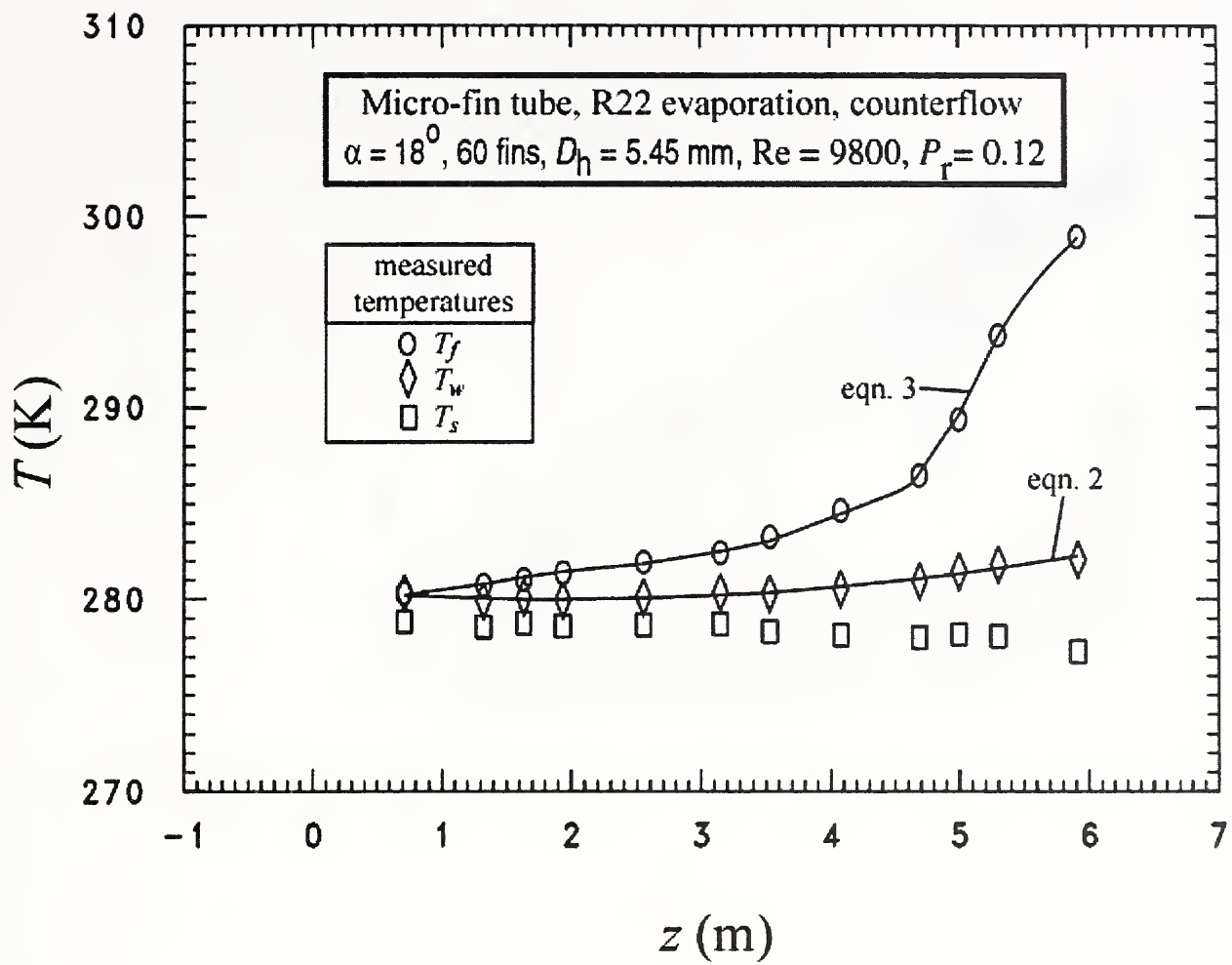


Figure 7 Counterflow temperature profiles for a R22 test

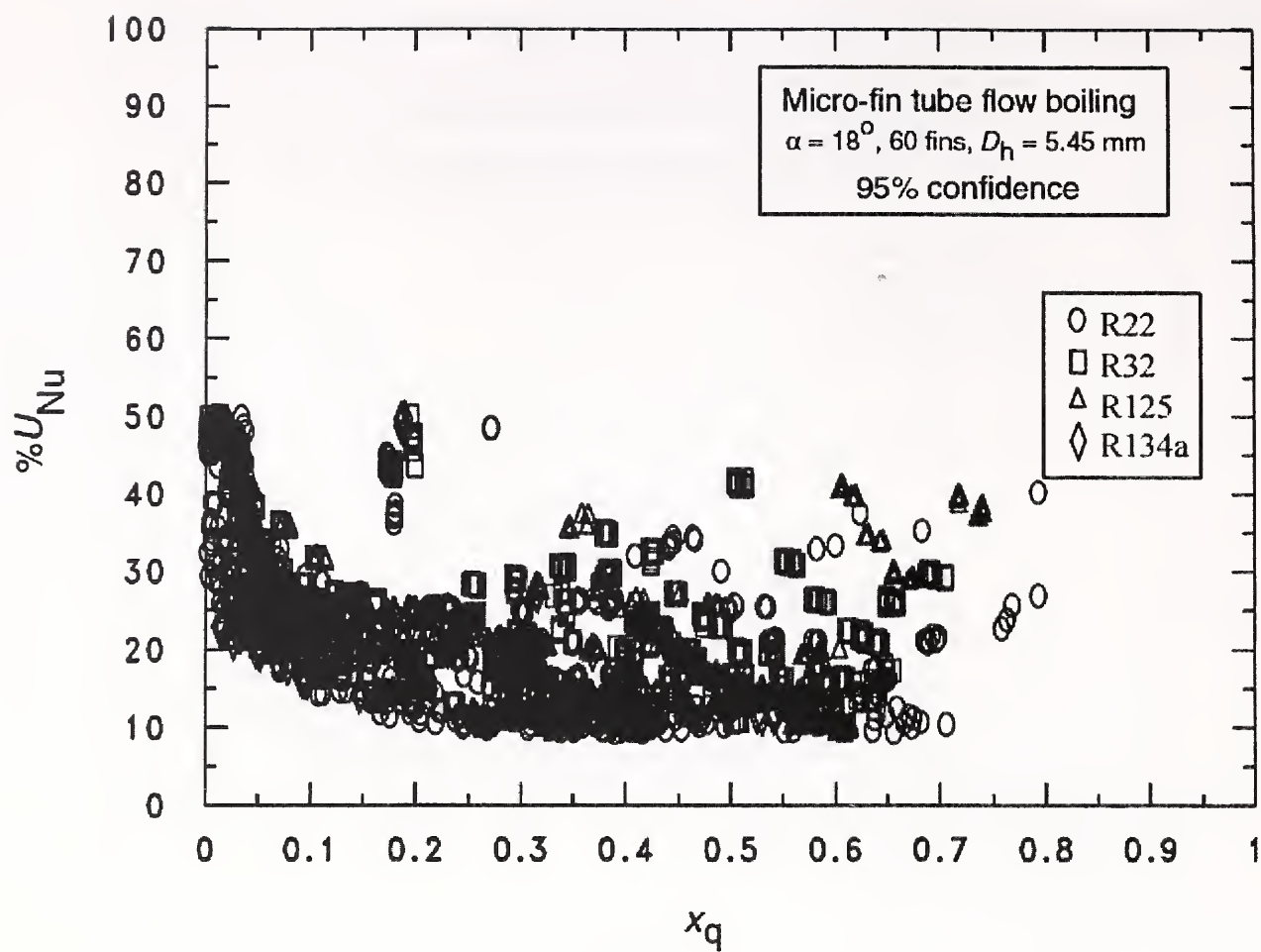


Figure 8 Relative uncertainty of the Nusselt number with respect to the quality

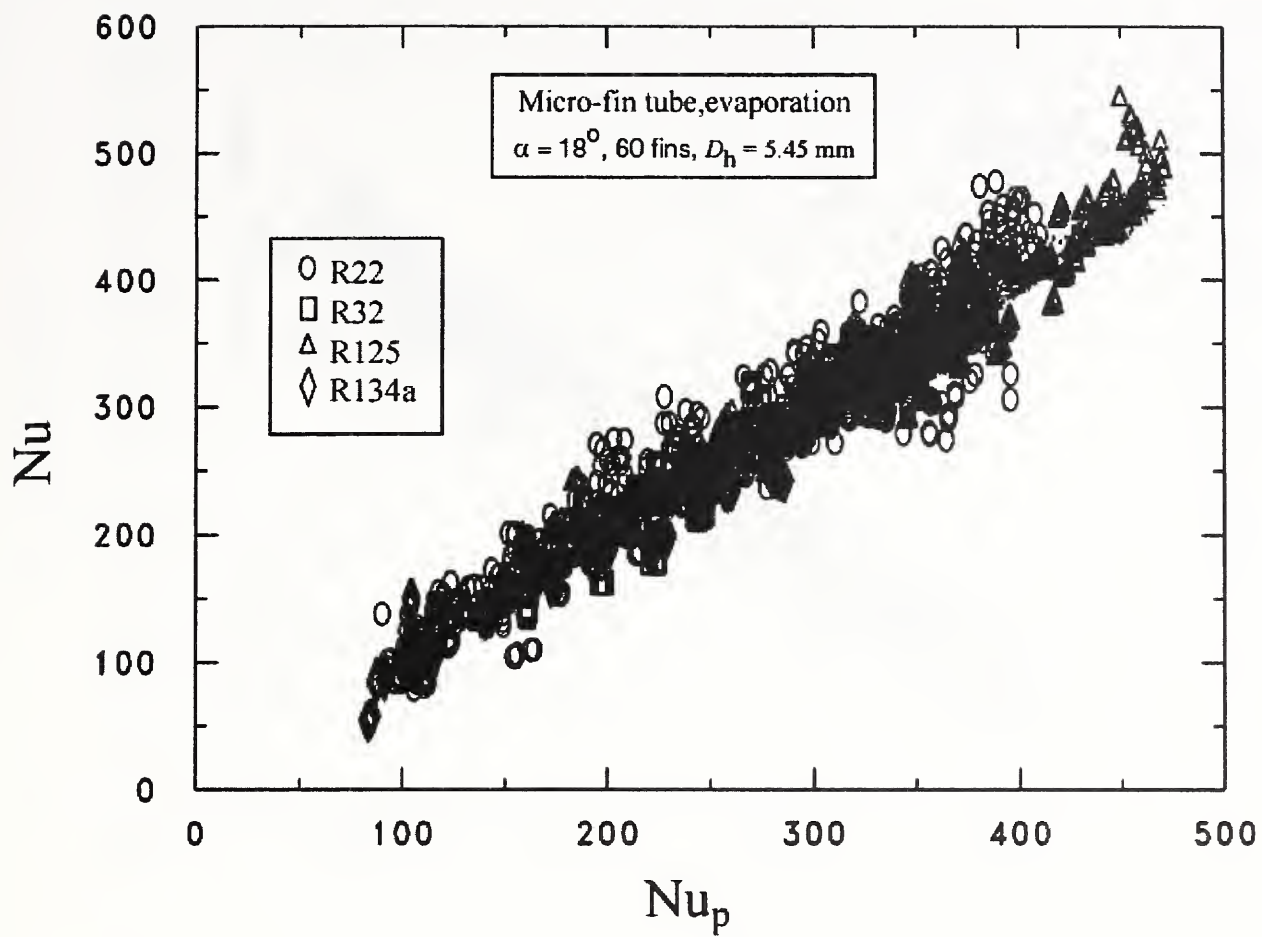


Figure 9 Comparison of measured and predicted convective boiling Nusselt numbers for pure refrigerants

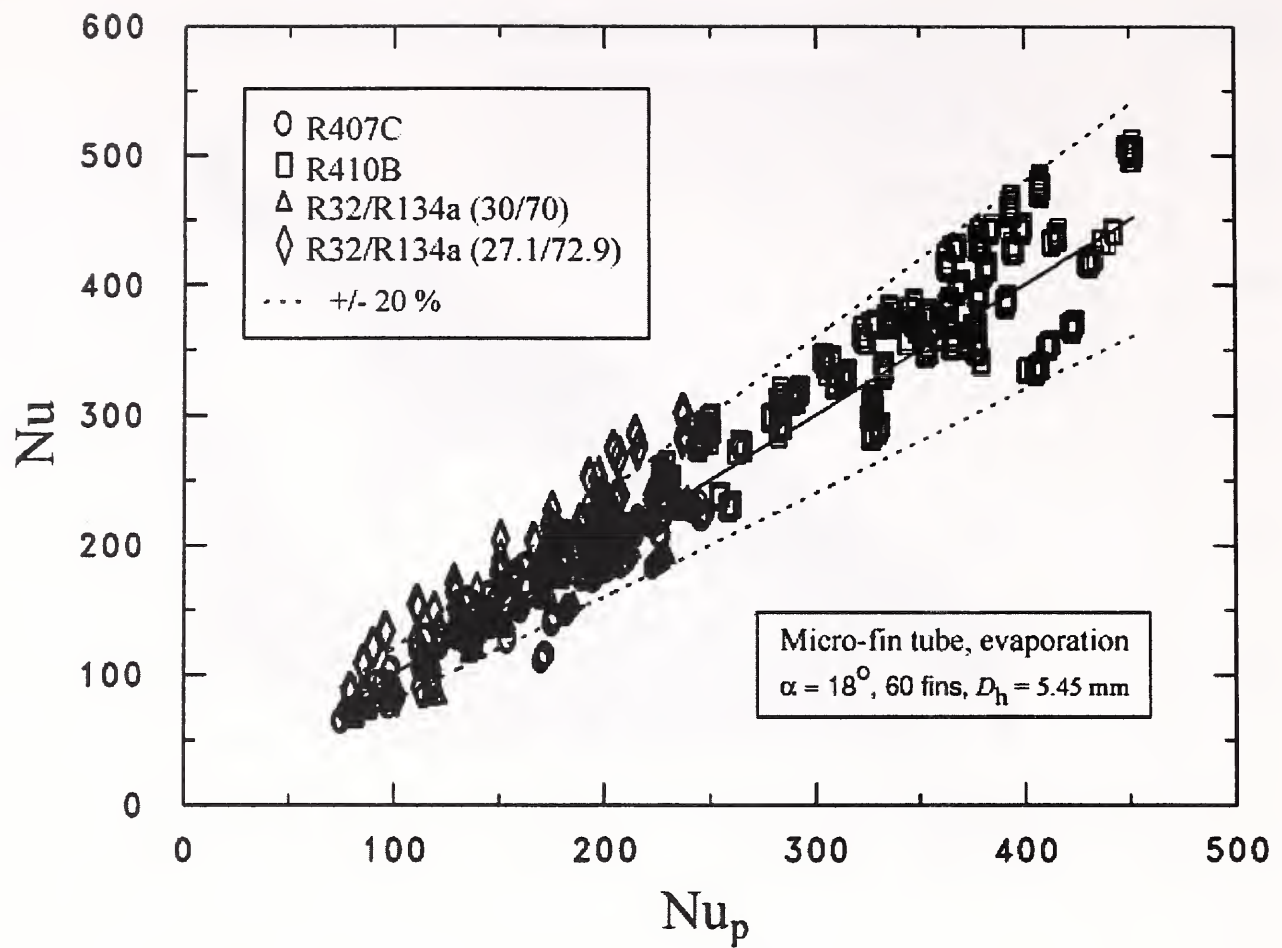


Figure 10 Comparison of measured and predicted convective boiling Nusselt numbers for mixed refrigerants

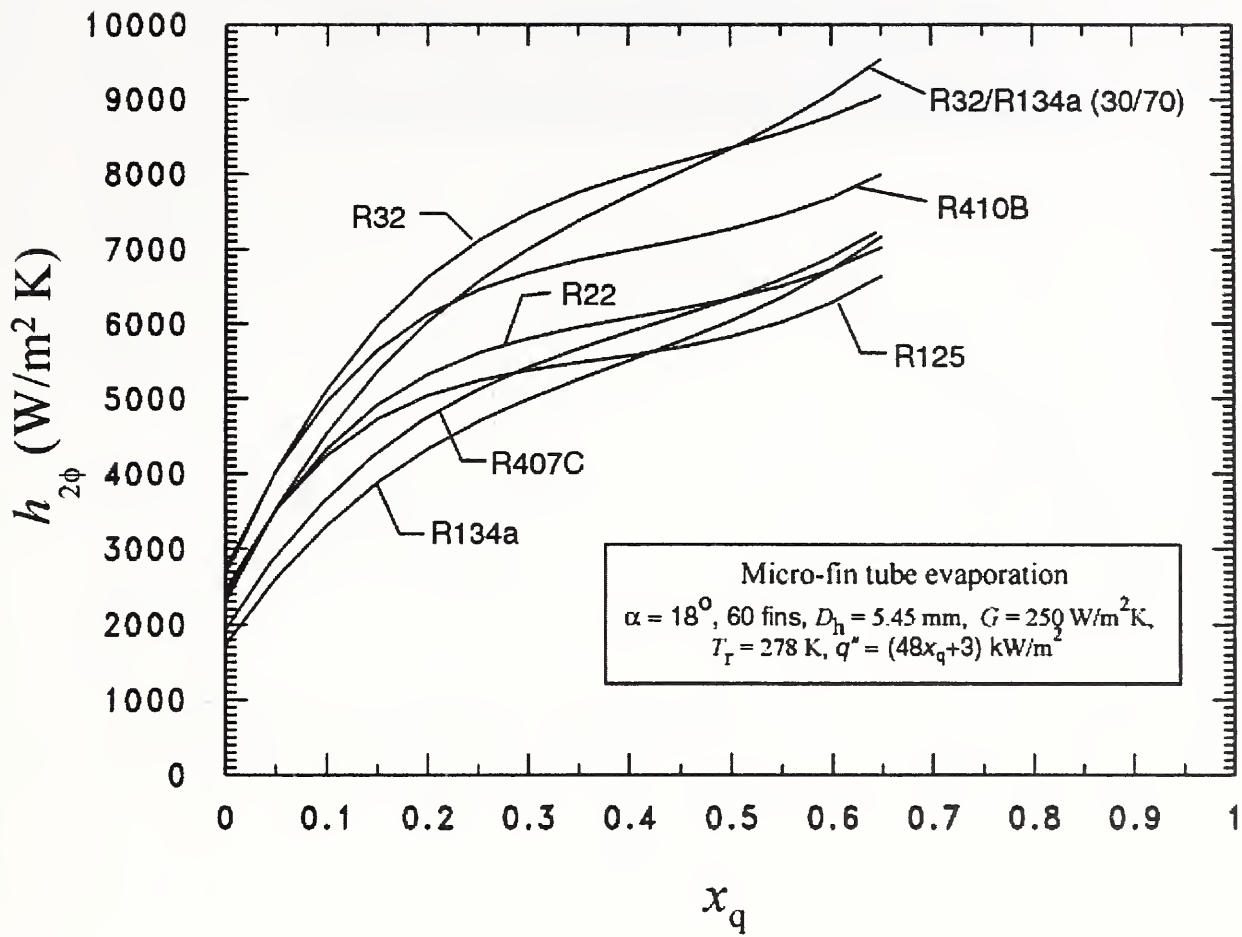


Figure 11 Comparison of the heat transfer coefficient for different fluids versus thermodynamic quality

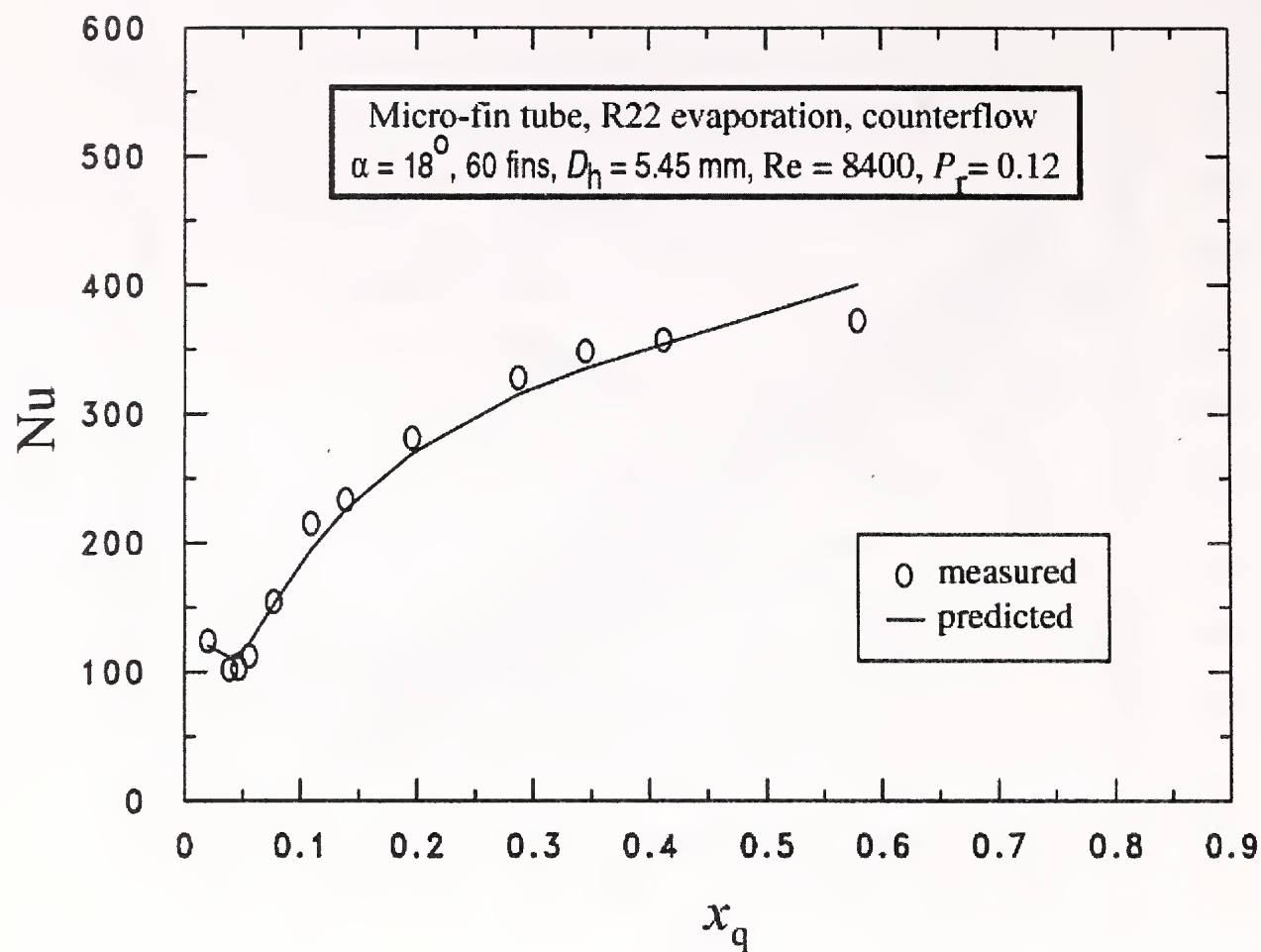


Figure 12 Flow boiling Nusselt numbers versus thermodynamic quality for R22

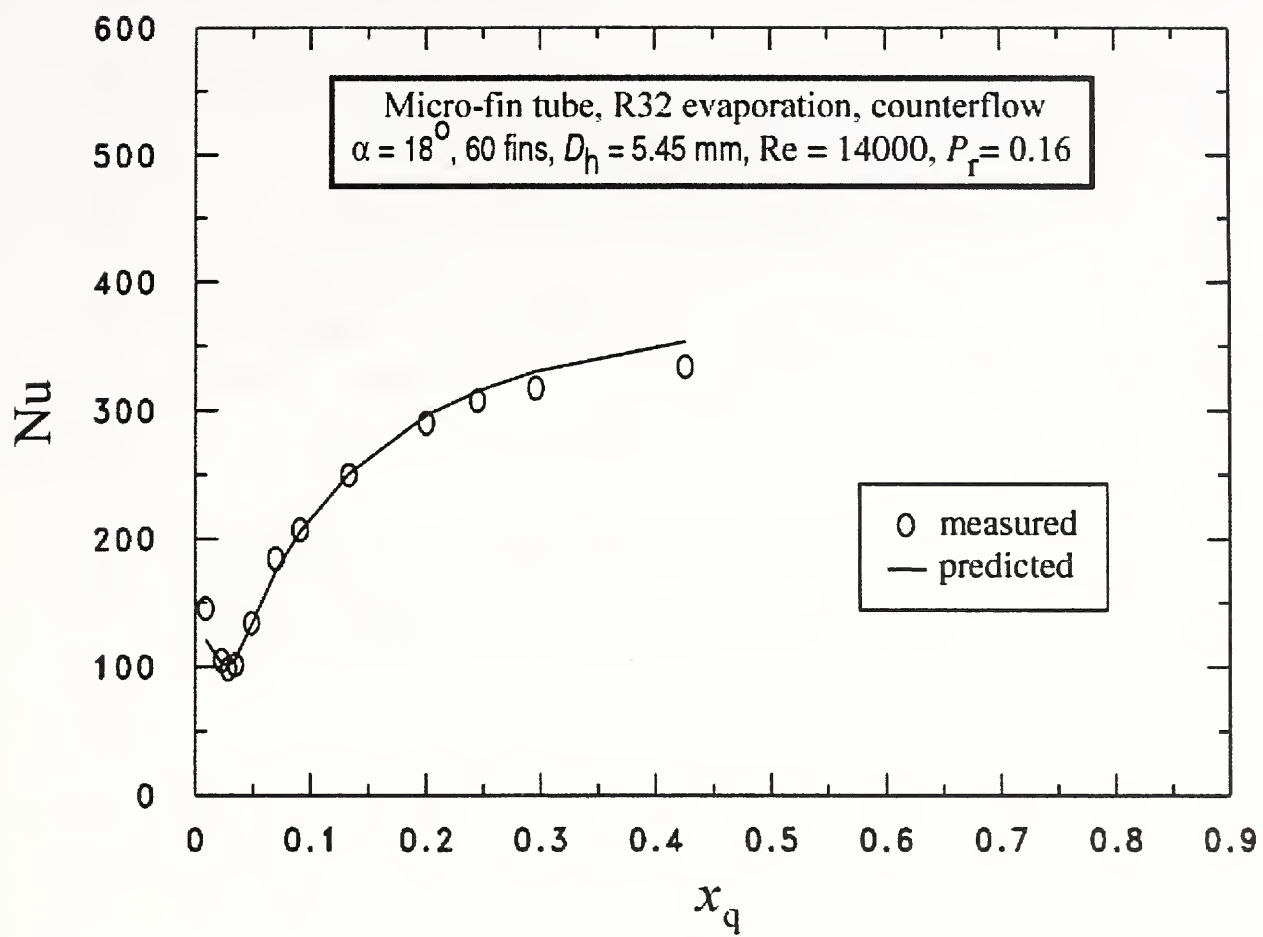


Figure 13 Flow boiling Nusselt numbers versus thermodynamic quality for R32

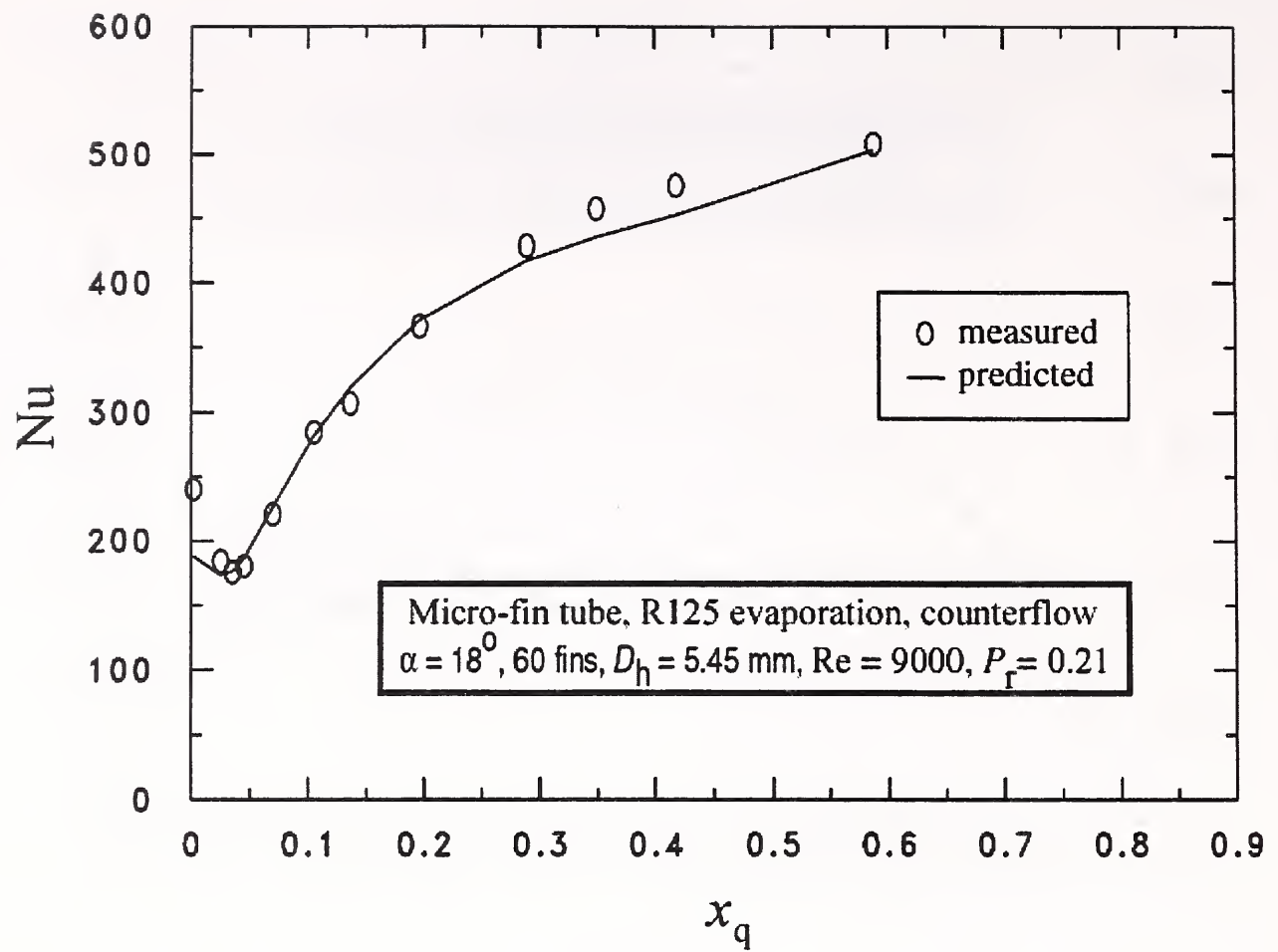


Figure 14 Flow boiling Nusselt numbers versus thermodynamic quality for R125

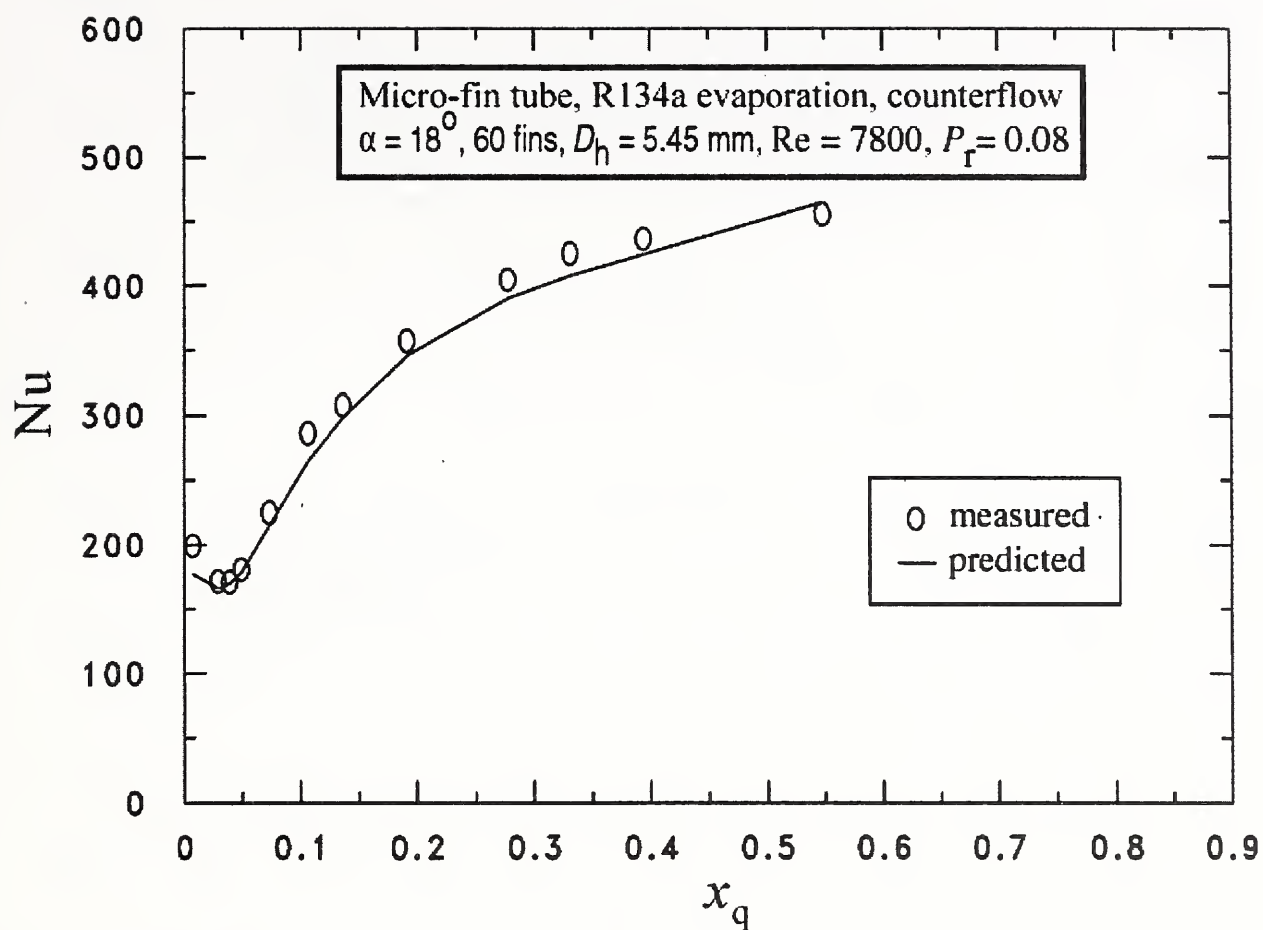


Figure 15 Flow boiling Nusselt numbers versus thermodynamic quality for R134a

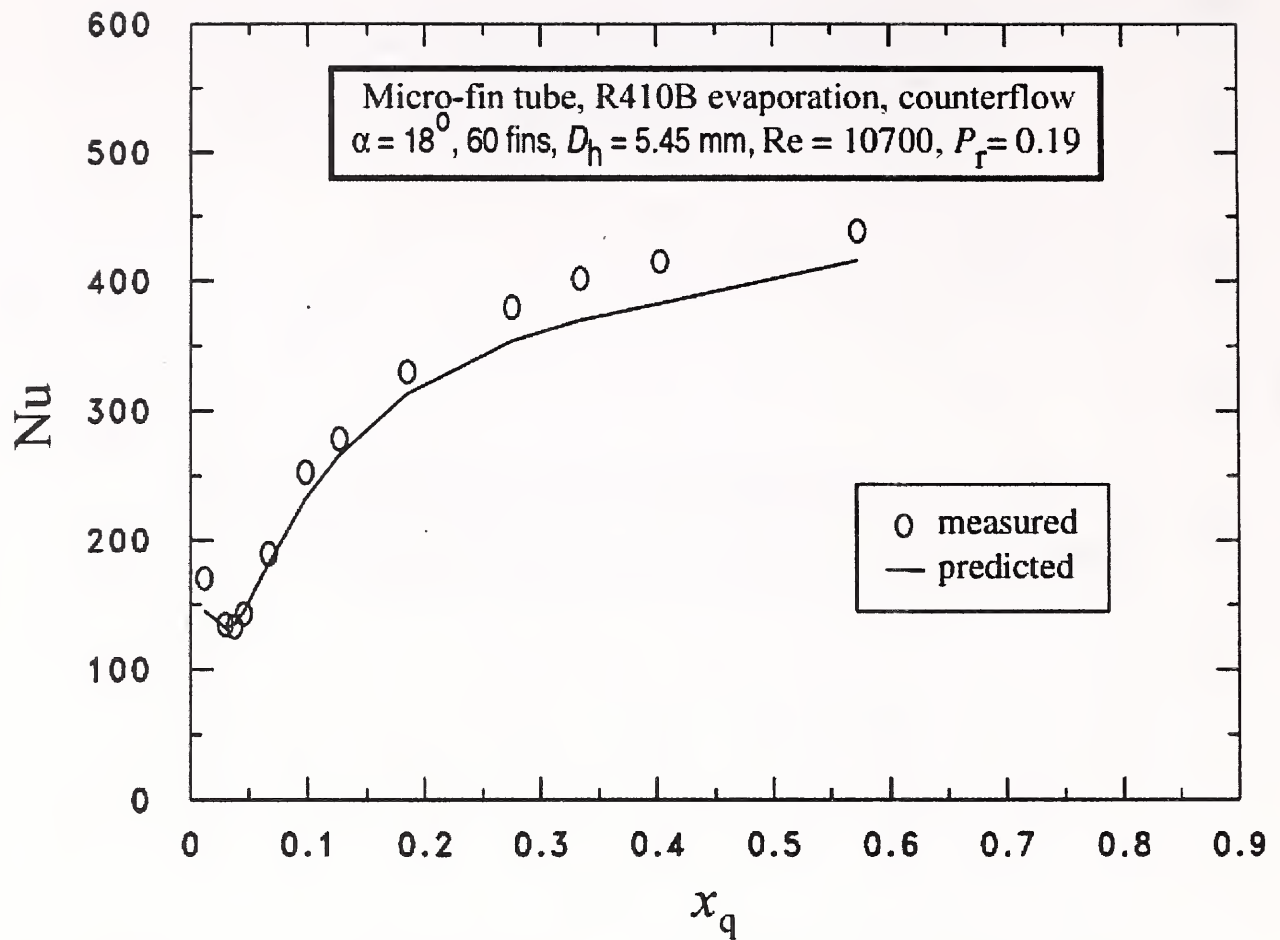


Figure 16 Flow boiling Nusselt numbers versus thermodynamic quality for R410B

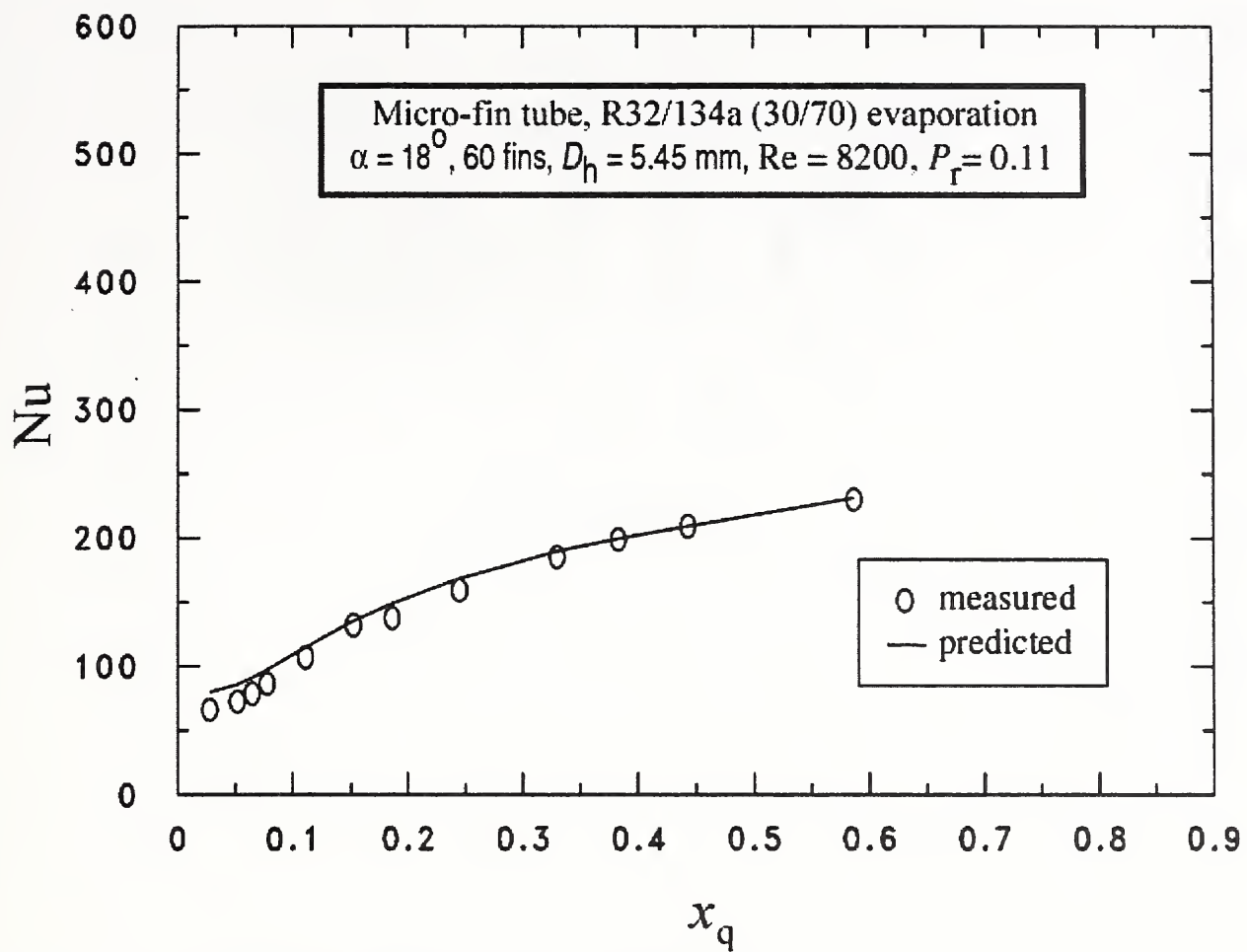


Figure 17 Flow boiling Nusselt numbers versus thermodynamic quality for R32/134a

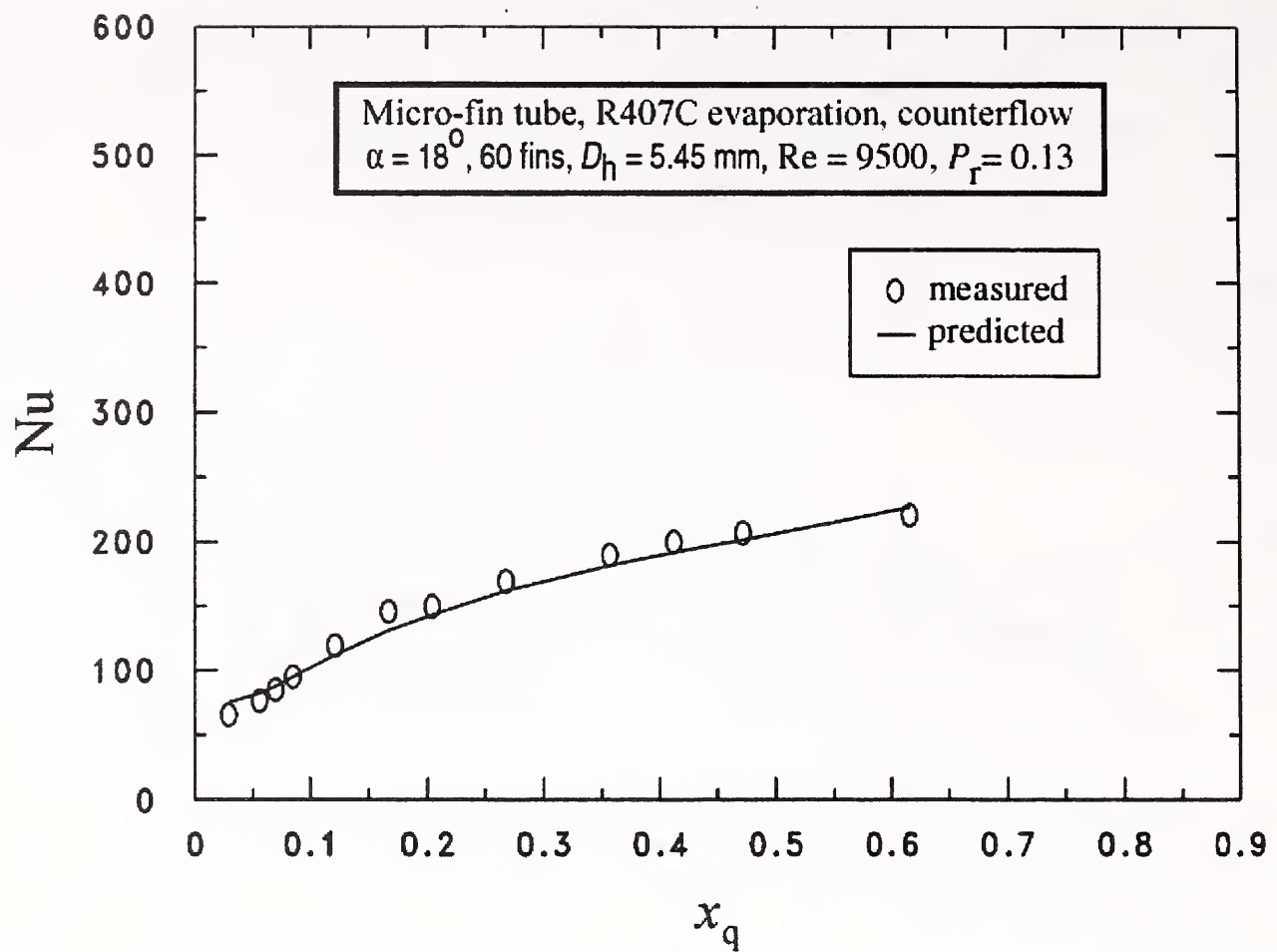


Figure 18 Flow boiling Nusselt numbers versus thermodynamic quality for R407C

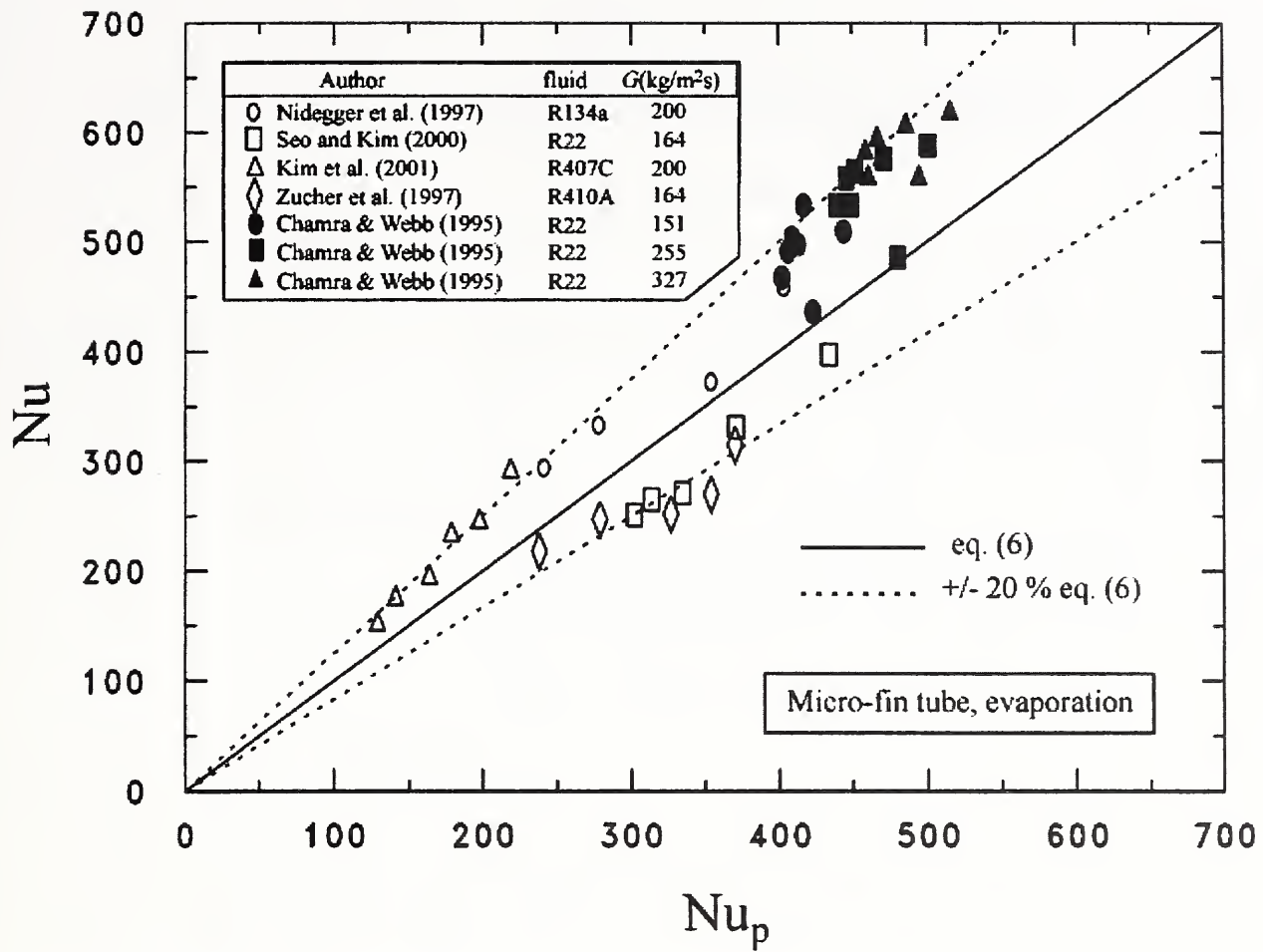


Figure 19 Comparison of eq. (6) to measured flow boiling Nu from the literature (see Table 3)

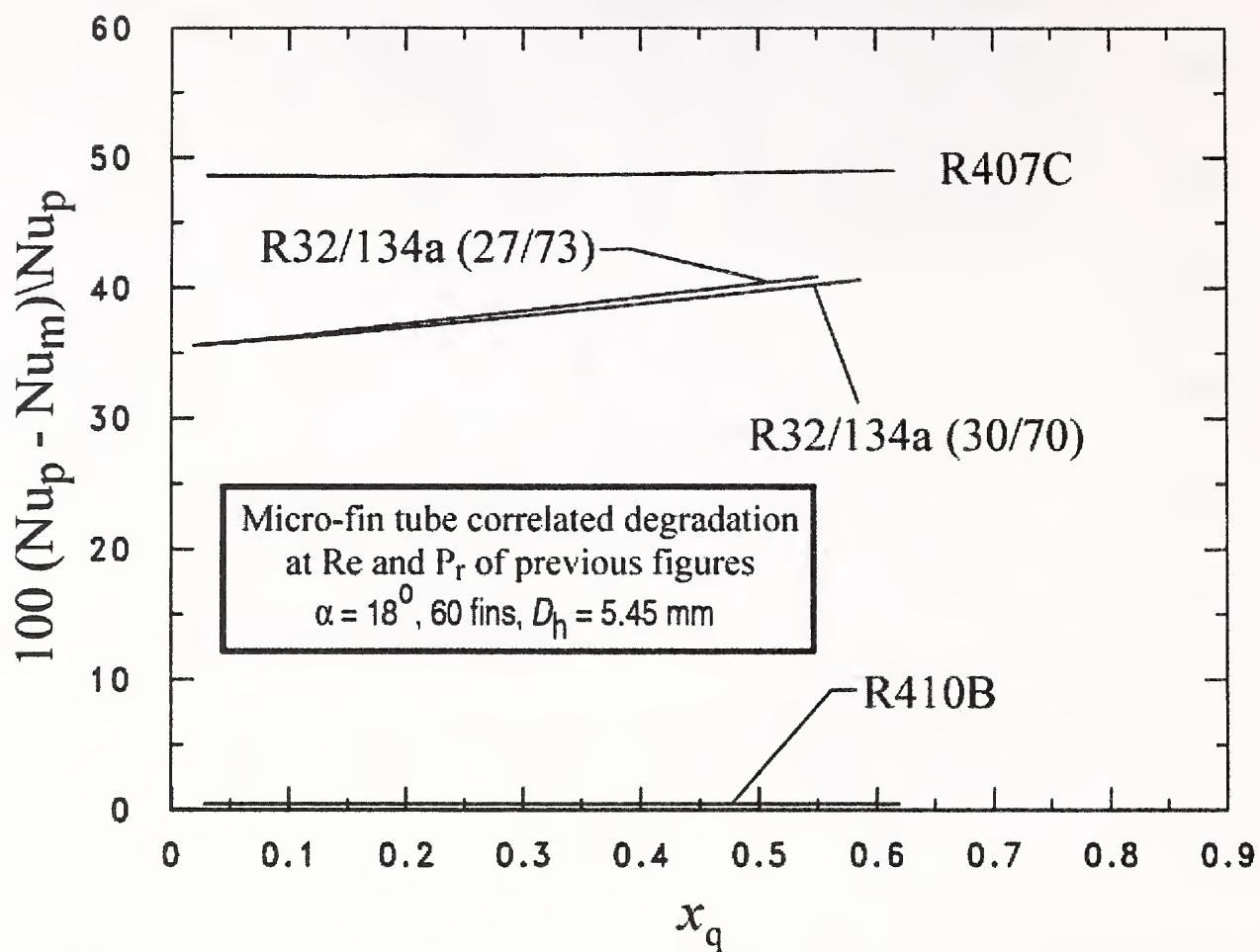


Figure 20 Heat transfer degradation for mixture data

APPENDIX A1

Convective Boiling of R22 within a micro-fin tube

(file: taepure.tbl)

Nu	Re	x_g	Bo	P/P_c	T/T_c	M_w	S_v	Pr	flow	E_b	U_{w0}	118.9	6898	0.008	4.77E-05	0.118	0.754	86.47	35.52	2.62	C	2.60	63.85
138.9	8374	0.011	5.13E-05	0.119	0.755	86.47	31.37	2.61	C	2.51	49.37	112.6	6896	0.027	4.05E-05	0.118	0.754	86.47	21.33	2.62	C	2.30	57.99
112.3	8370	0.030	3.71E-05	0.119	0.755	86.47	19.76	2.61	C	2.00	46.93	122.2	6895	0.036	4.30E-05	0.118	0.754	86.47	17.85	2.62	C	2.36	43.83
114.1	8369	0.038	3.68E-05	0.119	0.755	86.47	17.04	2.61	C	1.96	39.78	141.0	6895	0.046	4.95E-05	0.118	0.754	86.47	15.16	2.62	C	2.52	35.78
127.5	8368	0.047	4.10E-05	0.119	0.755	86.47	14.91	2.61	C	2.07	33.43	199.1	6894	0.072	7.44E-05	0.118	0.754	86.47	10.83	2.62	C	2.95	32.96
183.4	8366	0.069	6.28E-05	0.119	0.755	86.47	11.23	2.61	C	2.51	30.68	266.4	6892	0.112	1.14E-04	0.118	0.754	86.47	7.58	2.62	C	3.22	28.56
257.8	8364	0.103	1.02E-04	0.119	0.754	86.47	8.11	2.61	C	2.87	26.52	286.7	6884	0.148	1.47E-04	0.117	0.754	86.47	5.96	2.62	C	3.06	23.70
277.4	8348	0.136	1.35E-04	0.118	0.754	86.47	6.41	2.62	C	2.70	21.40	328.3	6880	0.216	2.06E-04	0.117	0.753	86.47	4.23	2.62	C	2.95	18.60
324.5	8338	0.200	1.95E-04	0.118	0.754	86.47	4.54	2.62	C	2.63	16.53	364.0	6874	0.323	2.87E-04	0.117	0.753	86.47	2.92	2.62	C	2.76	14.41
366.9	8327	0.303	2.79E-04	0.117	0.753	86.47	3.10	2.62	C	2.48	12.68	378.4	6872	0.391	3.33E-04	0.117	0.753	86.47	2.44	2.62	C	2.65	13.23
384.7	8321	0.370	3.29E-04	0.117	0.753	86.47	2.57	2.62	C	2.39	11.61	381.8	6864	0.468	3.83E-04	0.117	0.753	86.47	2.05	2.62	C	2.49	12.59
391.9	8309	0.447	3.81E-04	0.117	0.753	86.47	2.14	2.62	C	2.25	11.05	386.8	6848	0.659	4.95E-04	0.116	0.752	86.47	1.47	2.62	C	2.20	12.55
403.6	8283	0.638	5.00E-04	0.116	0.752	86.47	1.52	2.62	C	2.01	11.13	119.6	6881	0.008	4.90E-05	0.119	0.754	86.47	34.78	2.62	C	2.58	54.46
147.9	8368	0.012	5.11E-05	0.118	0.754	86.47	31.23	2.62	C	2.67	52.05	112.5	6878	0.027	4.03E-05	0.118	0.754	86.47	20.95	2.62	C	2.30	51.02
115.4	8365	0.031	3.77E-05	0.118	0.754	86.47	19.68	2.62	C	2.04	48.33	121.6	6877	0.037	4.21E-05	0.118	0.754	86.47	17.62	2.62	C	2.36	41.15
116.3	8364	0.039	3.80E-05	0.118	0.754	86.47	16.91	2.62	C	1.98	39.76	140.6	6877	0.046	4.79E-05	0.118	0.754	86.47	15.05	2.62	C	2.54	35.13
129.2	8363	0.048	4.29E-05	0.118	0.754	86.47	14.74	2.62	C	2.06	32.38	200.8	6876	0.072	7.18E-05	0.118	0.754	86.47	10.89	2.62	C	3.02	33.01
184.3	8360	0.071	6.66E-05	0.118	0.754	86.47	10.98	2.62	C	2.46	29.06	270.4	6875	0.110	1.11E-04	0.118	0.754	86.47	7.69	2.62	C	3.32	28.72
260.0	8358	0.107	1.08E-04	0.118	0.754	86.47	7.84	2.62	C	2.82	25.04	286.7	6866	0.145	1.44E-04	0.118	0.754	86.47	6.06	2.62	C	3.10	23.40
285.5	8343	0.142	1.43E-04	0.117	0.753	86.47	6.17	2.62	C	2.71	20.68	324.8	6861	0.212	2.02E-04	0.118	0.754	86.47	4.31	2.62	C	2.96	18.23
341.2	8334	0.210	2.06E-04	0.117	0.753	86.47	4.35	2.62	C	2.69	16.32	355.9	6854	0.317	2.82E-04	0.117	0.753	86.47	2.97	2.62	C	2.73	13.99
394.9	8324	0.318	2.94E-04	0.116	0.753	86.47	2.96	2.62	C	2.60	12.85	368.1	6851	0.384	3.29E-04	0.117	0.753	86.47	2.48	2.62	C	2.60	12.71
418.7	8318	0.388	3.45E-04	0.116	0.753	86.47	2.45	2.62	C	2.54	11.91	370.6	6844	0.460	3.79E-04	0.117	0.753	86.47	2.08	2.62	C	2.44	11.91
429.1	8306	0.469	4.00E-04	0.116	0.752	86.47	2.05	2.62	C	2.41	11.37	374.1	6828	0.649	4.91E-04	0.116	0.752	86.47	1.49	2.62	C	2.14	11.48
446.9	8279	0.670	5.23E-04	0.115	0.751	86.47	1.45	2.62	C	2.17	11.49	100.8	5429	0.009	4.26E-05	0.115	0.752	86.47	34.88	2.62	C	2.71	46.68
146.4	8311	0.012	5.17E-05	0.118	0.754	86.47	30.66	2.62	C	2.63	52.49	96.4	5427	0.026	3.72E-05	0.115	0.752	86.47	21.86	2.62	C	2.41	43.19
114.2	8308	0.031	3.80E-05	0.118	0.754	86.47	19.38	2.62	C	2.02	48.97	101.6	5426	0.034	3.86E-05	0.115	0.752	86.47	18.49	2.62	C	2.41	37.96
115.0	8306	0.040	3.82E-05	0.118	0.754	86.47	16.68	2.62	C	1.95	40.07	112.4	5426	0.043	4.26E-05	0.115	0.752	86.47	15.91	2.62	C	2.50	35.45
127.4	8305	0.049	4.31E-05	0.118	0.754	86.47	14.55	2.62	C	2.04	32.25	146.2	5425	0.065	5.89E-05	0.115	0.751	86.47	11.83	2.62	C	2.80	33.28
181.2	8302	0.072	6.70E-05	0.118	0.754	86.47	10.86	2.62	C	2.42	28.86	186.4	5424	0.095	8.52E-05	0.115	0.751	86.47	8.71	2.62	C	3.02	29.43
254.8	8300	0.109	1.08E-04	0.118	0.754	86.47	7.77	2.62	C	2.76	24.68	202.3	5420	0.122	1.07E-04	0.114	0.751	86.47	7.09	2.63	C	2.94	25.26
275.7	8282	0.144	1.44E-04	0.117	0.753	86.47	6.11	2.62	C	2.62	20.05	231.0	5418	0.171	1.46E-04	0.114	0.751	86.47	5.25	2.63	C	2.89	20.80
331.0	8274	0.212	2.08E-04	0.117	0.753	86.47	4.31	2.62	C	2.62	15.85	256.3	5416	0.246	2.00E-04	0.114	0.751	86.47	3.77	2.63	C	2.75	16.67
384.4	8264	0.321	2.96E-04	0.116	0.753	86.47	2.94	2.62	C	2.54	12.49	266.7	5415	0.293	2.31E-04	0.114	0.751	86.47	3.20	2.63	C	2.65	15.17
408.1	8259	0.391	3.48E-04	0.116	0.752	86.47	2.43	2.62	C	2.48	11.58	271.4	5412	0.347	2.65E-04	0.114	0.751	86.47	2.73	2.63	C	2.53	13.98
417.8	8246	0.473	4.03E-04	0.115	0.752	86.47	2.03	2.62	C	2.35	11.10	278.8	5405	0.478	3.40E-04	0.114	0.751	86.47	2.01	2.63	C	2.29	12.61
434.4	8218	0.675	5.28E-04	0.114	0.751	86.47	1.44	2.63	C	2.11	11.23	38.2	5164	-0.012	5.19E-05	0.118	0.749	86.47	116.73	2.63	C	2.11	29.98
138.4	8368	0.010	5.16E-05	0.119	0.755	86.47	32.40	2.61	C	2.51	50.19	92.8	5276	0.009	4.37E-05	0.118	0.754	86.47	34.32	2.62	C	2.52	38.63
106.7	8365	0.030	3.81E-05	0.119	0.755	86.47	20.06	2.61	C	1.90	47.25	96.7	5275	0.019	4.47E-05	0.118	0.754	86.47	25.75	2.62	C	2.44	33.80
107.5	8363	0.038	3.85E-05	0.119	0.755	86.47	17.17	2.61	C	1.83	38.02	106.5	5274	0.029	4.92E-05	0.118	0.754	86.47	20.43	2.62	C	2.47	31.28
119.5	8362	0.047	4.36E-05	0.119	0.754	86.47	14.90	2.61	C	1.91	29.92	140.6	5274	0.054	6.85E-05	0.118	0.754	86.47	13.50	2.62	C	2.69	29.67
171.9	8359	0.070	6.79E-05	0.119	0.754	86.47	11.02	2.61	C	2.29	26.67	183.9	5273	0.089	1.01E-04	0.118	0.754	86.47	9.13	2.62	C	2.88	26.51
245.6	8356	0.108	1.10E-04	0.119	0.754	86.47	7.82	2.62	C	2.64	23.07	205.0	5269	0.121	1.28E-04	0.118	0.754	86.47	7.11	2.62	C	2.84	23.14
268.3	8338	0.143	1.46E-04	0.118	0.754	86.47	6.12	2.62	C	2.52	18.80	239.2	5268	0.180	1.77E-04	0.118	0.754	86.47	5.01	2.62	C	2.80	19.12
321.9	8325	0.213	2.10E-04	0.117	0.753	86.47	4.30	2.62	C	2.52	14.84	270.6	5265	0.270	2.44E-04	0.117	0.753	86.47	3.45	2.62	C	2.67	15.44
375.4	8311	0.323	2.99E-04	0.117	0.753	86.47	2.92	2.62	C	2.45	11.79	283.7	5264	0.328	2.83E-04	0.117	0.753	86.47	2.87	2.62	C	2.59	14.17
399.6	8304	0.395	3.52E-04	0.116	0.753	86.47	2.41	2.62	C	2.40	10.96	291.3	5261	0.394	3.25E-04	0.117	0.753	86.47	2.42	2.62	C	2.48	13.19
413.8	8291	0.477	4.08E-04	0.116	0.752	86.47	2.01	2.62	C	2.30	10.57	303.4	5255	0.555	4.19E-04	0.117	0.753	86.47	1.74	2.62	C	2.25	12.39
438.6	8264	0.682	5.34E-04	0.115	0.752	86.47	1.43	2.62	C	2.11	10.73	32.6	5181	-0.015	5.19E-05	0.119	0.748	86.47	190.80	2.64	C	1.79	30.10
132.8	8469	0.007	4.81E-05	0.119	0.755	86.47	36.61	2.61	C	2.53	57.19	94.8	5328	0.006	4.37E-05	0.119	0.754	86.47	38.63	2.61	C	2.63	38.89
112.3	8466	0.025	3.74E-05	0.119	0.755	86.47	22.02	2.61	C	2.04	54.55	98.4	5327	0.015	4.45E-05	0.119	0.754	86.47	28.12	2.62	C	2.52	33.92
117.9	8464	0.033	3.87E-05	0.119	0.755	86.47	18.61	2.61	C	2.03	42.04	108.0	5326	0.025	4.86E-05	0.119	0.754	86.47	21.94	2.62	C	2.54	31.58
134.7	8463	0.042	4.45E-05	0.119	0.755																		

14.0	7608	-0.094	6.61E-05	0.118	0.710	86.47	-13.46	2.79	C	0.52	262.60	444.8	11276	0.336	3.20E-04	0.117	0.753	86.47	2.81	2.62	C	2.29	10.03
36.0	7939	-0.072	1.25E-04	0.117	0.720	86.47	-19.13	2.75	C	1.32	122.30	452.2	11247	0.411	3.75E-04	0.116	0.752	86.47	2.32	2.62	C	2.14	9.70
99.6	8471	-0.038	1.79E-04	0.117	0.736	86.47	-55.13	2.68	C	3.60	54.09	465.0	11184	0.603	5.01E-04	0.114	0.751	86.47	1.61	2.63	C	1.90	9.75
2547.6	9094	0.061	2.70E-04	0.117	0.753	86.47	12.29	2.62	C	17.48	771.30	150.6	9813	0.012	5.20E-05	0.119	0.755	86.47	31.08	2.61	C	2.41	45.62
956.0	9087	0.190	3.32E-04	0.117	0.753	86.47	4.76	2.62	C	5.62	254.70	106.8	9809	0.030	3.40E-05	0.119	0.755	86.47	19.87	2.61	C	1.73	46.57
456.6	9031	0.287	3.58E-04	0.115	0.751	86.47	3.26	2.62	C	2.57	113.90	103.6	9807	0.037	3.25E-05	0.119	0.755	86.47	17.35	2.61	C	1.63	40.33
253.4	9000	0.433	3.81E-04	0.114	0.751	86.47	2.21	2.63	C	1.39	57.46	114.4	9805	0.045	3.60E-05	0.119	0.754	86.47	15.38	2.61	C	1.71	31.05
147.5	8965	0.600	3.83E-04	0.112	0.750	86.47	1.62	2.63	C	0.82	33.36	172.7	9801	0.065	5.81E-05	0.119	0.754	86.47	11.78	2.62	C	2.17	26.85
114.6	8947	0.683	3.74E-04	0.112	0.749	86.47	1.42	2.63	C	0.65	35.27	259.6	9797	0.097	9.90E-05	0.119	0.754	86.47	8.50	2.62	C	2.62	22.47
90.2	8934	0.763	3.60E-04	0.111	0.749	86.47	1.28	2.63	C	0.53	58.17	291.2	9776	0.130	1.35E-04	0.118	0.754	86.47	6.66	2.62	C	2.55	18.19
55.1	8910	0.911	3.13E-04	0.110	0.748	86.47	1.08	2.64	C	0.36	113.50	359.2	9764	0.195	2.00E-04	0.117	0.753	86.47	4.65	2.62	C	2.59	14.24
-8.4	7183	-0.108	-5.08E-05	0.118	0.703	86.47	-11.32	2.82	C	-0.32	102.20	424.8	9750	0.301	2.91E-04	0.117	0.753	86.47	3.11	2.62	C	2.53	11.23
30.3	7484	-0.087	1.36E-04	0.118	0.713	86.47	-14.88	2.78	C	1.15	386.90	453.7	9743	0.371	3.45E-04	0.117	0.753	86.47	2.56	2.62	C	2.47	10.32
87.6	8084	-0.047	2.16E-04	0.118	0.732	86.47	-37.03	2.70	C	3.26	71.99	462.6	9723	0.453	4.02E-04	0.116	0.752	86.47	2.12	2.62	C	2.33	9.73
837.8	8829	0.009	2.86E-04	0.117	0.753	86.47	34.95	2.62	C	5.88	249.30	477.9	9679	0.656	5.32E-04	0.114	0.751	86.47	1.48	2.63	C	2.08	9.34
725.1	8817	0.156	3.84E-04	0.117	0.753	86.47	5.67	2.62	C	4.03	171.80	144.6	9939	0.012	5.26E-05	0.119	0.755	86.47	30.67	2.61	C	2.28	46.59
417.7	8805	0.332	4.34E-04	0.116	0.753	86.47	2.84	2.62	C	2.14	95.39	102.6	9935	0.030	3.34E-05	0.119	0.755	86.47	19.70	2.61	C	1.65	47.82
256.2	8728	0.454	4.40E-04	0.114	0.751	86.47	2.11	2.63	C	1.32	59.30	98.8	9933	0.038	3.13E-05	0.119	0.754	86.47	17.29	2.61	C	1.55	42.20
154.9	8699	0.624	4.19E-04	0.112	0.750	86.47	1.56	2.63	C	0.83	37.53	108.3	9931	0.045	3.41E-05	0.119	0.754	86.47	15.41	2.61	C	1.62	32.68
85.3	8666	0.793	3.52E-04	0.111	0.749	86.47	1.23	2.63	C	0.52	26.91	164.0	9927	0.063	5.48E-05	0.119	0.754	86.47	11.95	2.62	C	2.08	28.21
60.3	8650	0.865	3.00E-04	0.111	0.748	86.47	1.13	2.64	C	0.41	43.47	248.2	9922	0.094	9.41E-05	0.118	0.754	86.47	8.72	2.62	C	2.53	23.33
40.4	8638	0.924	2.37E-04	0.110	0.748	86.47	1.06	2.64	C	0.32	246.10	274.4	9898	0.126	1.29E-04	0.118	0.754	86.47	6.86	2.62	C	2.43	18.65
9.6	8615	0.994	7.66E-05	0.109	0.747	86.47	0.99	2.64	C	0.16	206.00	335.6	9883	0.188	1.92E-04	0.117	0.753	86.47	4.80	2.62	C	2.44	14.23
157.2	11652	0.002	5.31E-05	0.127	0.760	86.47	41.59	2.60	C	2.39	45.19	393.3	9866	0.291	2.82E-04	0.117	0.753	86.47	3.22	2.62	C	2.36	10.96
97.9	11647	0.020	3.09E-05	0.127	0.760	86.47	23.89	2.60	C	1.54	47.08	418.3	9857	0.359	3.34E-04	0.116	0.753	86.47	2.64	2.62	C	2.30	10.09
86.6	11644	0.026	2.71E-05	0.127	0.760	86.47	20.73	2.60	C	1.34	43.86	427.4	9837	0.438	3.91E-04	0.116	0.752	86.47	2.19	2.62	C	2.17	9.66
89.3	11641	0.032	2.81E-05	0.127	0.760	86.47	18.45	2.60	C	1.32	34.61	442.8	9793	0.636	5.18E-04	0.114	0.751	86.47	1.53	2.63	C	1.94	9.58
133.2	11636	0.048	4.46E-05	0.127	0.760	86.47	14.39	2.60	C	1.67	28.46	118.4	9972	0.013	4.12E-05	0.121	0.756	86.47	29.25	2.61	C	2.01	72.09
211.6	11631	0.074	7.92E-05	0.127	0.760	86.47	10.50	2.60	C	2.12	22.30	103.9	9968	0.029	3.27E-05	0.121	0.756	86.47	20.10	2.61	C	1.69	71.40
246.0	11603	0.100	1.11E-04	0.126	0.759	86.47	8.20	2.60	C	2.12	17.90	114.9	9966	0.037	3.53E-05	0.121	0.756	86.47	17.48	2.61	C	1.77	51.13
317.7	11587	0.155	1.69E-04	0.125	0.759	86.47	5.67	2.60	C	2.22	13.55	138.0	9964	0.045	4.26E-05	0.121	0.756	86.47	15.23	2.61	C	1.97	33.61
390.6	11570	0.246	2.53E-04	0.125	0.759	86.47	3.74	2.60	C	2.22	10.59	214.4	9959	0.069	7.08E-05	0.120	0.756	86.47	11.14	2.61	C	2.49	28.50
423.9	11562	0.307	3.02E-04	0.124	0.759	86.47	3.04	2.60	C	2.20	9.88	307.7	9955	0.108	1.16E-04	0.120	0.756	86.47	7.76	2.61	C	2.87	23.86
437.9	11535	0.379	3.55E-04	0.124	0.758	86.47	2.50	2.60	C	2.09	9.61	323.9	9926	0.146	1.54E-04	0.119	0.755	86.47	6.00	2.61	C	2.63	18.85
461.8	11479	0.560	4.75E-04	0.122	0.757	86.47	1.72	2.61	C	1.89	9.64	382.7	9912	0.219	2.21E-04	0.119	0.754	86.47	4.18	2.61	C	2.60	14.43
147.3	11479	0.009	5.44E-05	0.122	0.757	86.47	32.99	2.61	C	2.12	46.90	436.1	9896	0.334	3.12E-04	0.118	0.754	86.47	2.82	2.62	C	2.48	11.14
93.6	11476	0.027	3.13E-05	0.122	0.757	86.47	20.69	2.61	C	1.40	49.40	458.6	9888	0.409	3.65E-04	0.118	0.754	86.47	2.33	2.62	C	2.40	10.36
84.4	11474	0.034	2.75E-05	0.122	0.757	86.47	18.26	2.61	C	1.25	46.40	464.6	9868	0.494	4.22E-04	0.117	0.753	86.47	1.94	2.62	C	2.26	10.16
88.9	11471	0.040	2.90E-05	0.122	0.757	86.47	16.42	2.61	C	1.26	35.84	474.4	9826	0.706	5.48E-04	0.116	0.752	86.47	1.38	2.62	C	2.00	10.42
137.6	11466	0.056	4.75E-05	0.122	0.757	86.47	12.99	2.61	C	1.66	29.07	129.1	8251	0.013	4.48E-05	0.120	0.756	86.47	30.08	2.61	C	2.46	51.75
220.6	11460	0.084	8.55E-05	0.122	0.757	86.47	9.56	2.61	C	2.13	22.68	97.2	8249	0.028	3.01E-05	0.120	0.755	86.47	20.40	2.61	C	1.86	51.84
252.9	11428	0.113	1.20E-04	0.121	0.756	86.47	7.49	2.61	C	2.10	18.01	96.6	8248	0.035	2.93E-05	0.120	0.755	86.47	18.01	2.61	C	1.79	45.05
323.1	11411	0.172	1.83E-04	0.120	0.756	86.47	5.19	2.61	C	2.19	13.46	107.6	8247	0.042	3.28E-05	0.120	0.755	86.47	16.07	2.61	C	1.89	36.14
392.5	11391	0.271	2.73E-04	0.120	0.755	86.47	3.43	2.61	C	2.17	10.34	158.6	8244	0.060	5.29E-05	0.120	0.755	86.47	12.45	2.61	C	2.35	31.65
423.5	11381	0.337	3.27E-04	0.119	0.755	86.47	2.80	2.61	C	2.13	9.63	226.8	8242	0.089	8.93E-05	0.120	0.755	86.47	9.09	2.61	C	2.71	26.15
436.0	11353	0.414	3.84E-04	0.119	0.754	86.47	2.30	2.61	C	2.02	9.46	251.7	8231	0.119	1.21E-04	0.119	0.755	86.47	7.20	2.61	C	2.62	21.17
457.0	11294	0.610	5.14E-04	0.117	0.753	86.47	1.59	2.62	C	1.82	9.78	299.5	8224	0.177	1.79E-04	0.119	0.755	86.47	5.07	2.61	C	2.57	16.27
136.1	11212	0.008	5.24E-05	0.122	0.757	86.47	34.34	2.61	C	2.03	43.99	342.0	8217	0.271	2.59E-04	0.119	0.754	86.47	3.43	2.61	C	2.42	12.47
85.7	11207	0.026	3.09E-05	0.122	0.757	86.47	21.41	2.61	C	1.32	46.14	359.7	8213	0.333	3.06E-04	0.119	0.754	86.47	2.83	2.61	C	2.34	11.35
77.9	11205	0.032	2.78E-05	0.122	0.757	86.47	18.81	2.61	C	1.18	42.42	365.8	8202	0.405	3.56E-04	0.118	0.754	86.47	2.35	2.62	C	2.20	10.70
82.9	11202	0.039	2.97E-05	0.122	0.757	86.47	16.84	2.61	C	1.20	31.94	375.9	8178	0.585	4.70E-04	0.117	0.753	86.47	1.65	2.62	C	1.95	10.43
128.6	11195	0.055	4.88E-05	0.122	0.757	86.47	13.16	2.61	C	1.57	25.83	123.2	8021	0.013	4.02E-05	0.117	0.754	86.47	30.62	2.62	C	2.48	50.25
206.7	11189	0.083	8.70E-05	0.121	0.756	86.47	9.59	2.61	C	2.02	20.47	102.5	8019	0.028	3.14E-05	0.117	0.753	86.47</					

234.0	10008	0.093	9.00E-05	0.124	0.758	86.47	8.75	2.60	C	2.42	23.09	42.4	12567	-0.057	5.36E-05	0.186	0.772	86.47	-40.56	2.56	C	1.12	7.88
266.4	9990	0.123	1.23E-04	0.124	0.758	86.47	6.95	2.60	C	2.39	18.86	42.9	12806	-0.046	4.42E-05	0.186	0.776	86.47	-74.20	2.55	C	1.13	8.21
330.6	9979	0.183	1.85E-04	0.123	0.758	86.47	4.91	2.60	C	2.44	14.62	42.2	13002	-0.037	3.61E-05	0.186	0.780	86.47	-219.64	2.54	C	1.11	9.41
393.6	9967	0.281	2.71E-04	0.123	0.757	86.47	3.31	2.60	C	2.39	11.47	42.0	13293	-0.025	2.33E-05	0.186	0.785	86.47	117.81	2.52	C	0.96	13.67
421.7	9961	0.346	3.21E-04	0.123	0.757	86.47	2.72	2.61	C	2.34	10.61	30.0	13481	-0.017	1.55E-05	0.186	0.789	86.47	59.79	2.52	C	0.78	18.64
432.5	9942	0.422	3.75E-04	0.122	0.757	86.47	2.26	2.61	C	2.21	10.12	27.5	13570	-0.012	1.29E-05	0.186	0.790	86.47	47.93	2.51	C	0.71	20.88
450.9	9902	0.612	4.98E-04	0.121	0.756	86.47	1.58	2.61	C	1.99	9.99	31.6	13684	-0.007	1.27E-05	0.185	0.792	86.47	38.49	2.51	C	0.82	22.03
144.6	10108	0.018	4.73E-05	0.120	0.755	86.47	26.11	2.61	C	2.25	50.22	62.9	13833	-0.001	1.71E-05	0.185	0.795	86.47	30.73	2.50	C	1.63	28.15
101.6	10105	0.034	3.09E-05	0.120	0.755	86.47	18.25	2.61	C	1.61	49.90	80.1	13851	0.003	2.12E-05	0.185	0.795	86.47	27.15	2.50	C	1.46	29.38
98.1	10103	0.041	2.96E-05	0.120	0.755	86.47	16.28	2.61	C	1.51	42.92	96.7	13850	0.009	2.65E-05	0.185	0.795	86.47	23.80	2.50	C	1.57	30.73
107.2	10101	0.048	3.29E-05	0.120	0.755	86.47	14.66	2.61	C	1.57	32.91	151.5	13848	0.023	4.10E-05	0.185	0.795	86.47	17.67	2.50	C	1.96	40.58
158.2	10096	0.066	5.34E-05	0.120	0.755	86.47	11.57	2.61	C	1.98	28.08	44.4	15162	-0.114	7.09E-05	0.202	0.757	86.47	-12.66	2.61	C	0.96	9.29
232.3	10092	0.096	9.11E-05	0.119	0.755	86.47	8.57	2.61	C	2.36	23.04	48.5	15917	-0.086	5.55E-05	0.202	0.769	86.47	-19.93	2.57	C	1.04	8.45
261.1	10072	0.126	1.24E-04	0.119	0.754	86.47	6.83	2.61	C	2.32	18.73	49.7	16237	-0.074	4.85E-05	0.202	0.774	86.47	-26.13	2.55	C	1.06	8.28
318.9	10061	0.186	1.84E-04	0.118	0.754	86.47	4.84	2.62	C	2.34	14.39	50.1	16516	-0.064	4.21E-05	0.202	0.778	86.47	-35.77	2.54	C	1.06	9.02
374.1	10047	0.284	2.68E-04	0.118	0.754	86.47	3.29	2.62	C	2.27	11.15	47.7	16975	-0.047	3.11E-05	0.202	0.785	86.47	-88.63	2.53	C	1.01	12.25
398.3	10041	0.349	3.18E-04	0.118	0.754	86.47	2.71	2.62	C	2.22	10.31	41.6	17309	-0.036	2.27E-05	0.202	0.789	86.47	1499.81	2.51	C	0.87	15.79
406.0	10020	0.424	3.71E-04	0.117	0.753	86.47	2.25	2.62	C	2.09	9.91	36.4	17475	-0.030	1.84E-05	0.201	0.792	86.47	147.76	2.51	C	0.76	17.32
419.2	9975	0.611	4.90E-04	0.116	0.752	86.47	1.58	2.62	C	1.87	10.02	29.8	17662	-0.024	1.40E-05	0.202	0.794	86.47	77.56	2.50	C	0.62	18.33
152.5	10336	0.015	4.80E-05	0.123	0.757	86.47	27.56	2.61	C	2.37	50.31	26.0	17825	-0.019	1.15E-05	0.202	0.796	86.47	55.14	2.50	C	0.54	18.73
103.6	10332	0.032	3.07E-05	0.123	0.757	86.47	18.91	2.61	C	1.64	50.36	26.3	17900	-0.016	1.11E-05	0.202	0.797	86.47	48.77	2.50	C	0.55	22.58
98.1	10330	0.038	2.89E-05	0.122	0.757	86.47	16.83	2.61	C	1.52	44.04	28.7	17975	-0.014	1.14E-05	0.202	0.798	86.47	43.06	2.50	C	0.60	29.70
106.0	10328	0.045	3.19E-05	0.122	0.757	86.47	15.15	2.61	C	1.56	33.67	43.6	18142	-0.007	1.40E-05	0.201	0.801	86.47	34.13	2.49	C	0.90	44.28
156.4	10324	0.063	5.16E-05	0.122	0.757	86.47	11.96	2.61	C	1.97	28.44	44.1	14639	-0.111	6.93E-05	0.201	0.758	86.47	-13.10	2.60	C	0.99	9.47
233.0	10319	0.092	8.87E-05	0.122	0.757	86.47	8.86	2.61	C	2.37	23.27	48.3	15353	-0.083	5.47E-05	0.201	0.769	86.47	-20.83	2.57	C	1.07	8.68
261.7	10297	0.121	1.21E-04	0.121	0.756	86.47	7.03	2.61	C	2.32	18.75	49.7	15659	-0.072	4.81E-05	0.201	0.774	86.47	-27.62	2.55	C	1.09	8.64
323.2	10284	0.180	1.81E-04	0.121	0.756	86.47	4.97	2.61	C	2.36	14.43	50.4	15927	-0.062	4.21E-05	0.201	0.778	86.47	-38.38	2.54	C	1.10	9.43
383.6	10269	0.277	2.65E-04	0.120	0.756	86.47	3.36	2.61	C	2.31	11.27	49.1	16373	-0.045	3.18E-05	0.201	0.785	86.47	-105.32	2.53	C	1.07	12.75
410.6	10262	0.340	3.14E-04	0.120	0.755	86.47	2.77	2.61	C	2.27	10.44	44.5	16706	-0.034	2.38E-05	0.201	0.790	86.47	384.32	2.51	C	0.96	16.34
420.8	10240	0.415	3.67E-04	0.119	0.755	86.47	2.30	2.61	C	2.15	10.06	40.5	16877	-0.027	1.98E-05	0.200	0.792	86.47	107.36	2.51	C	0.87	17.96
438.6	10195	0.601	4.86E-04	0.118	0.754	86.47	1.61	2.62	C	1.93	10.14	35.4	17076	-0.020	1.57E-05	0.200	0.795	86.47	61.64	2.50	C	0.76	19.02
47.6	15611	-0.027	3.34E-05	0.131	0.751	86.47	-199.52	2.63	C	1.07	26.47	33.4	17257	-0.014	1.34E-05	0.200	0.797	86.47	44.56	2.50	C	0.72	19.98
54.2	15968	-0.015	2.29E-05	0.131	0.757	86.47	132.60	2.61	C	1.22	25.19	35.1	17342	-0.011	1.31E-05	0.201	0.799	86.47	39.47	2.49	C	0.75	23.35
60.4	16106	-0.010	1.94E-05	0.131	0.759	86.47	81.01	2.60	C	1.35	23.10	39.4	17426	-0.008	1.34E-05	0.200	0.800	86.47	35.22	2.49	C	0.84	30.20
72.1	16223	-0.006	1.70E-05	0.131	0.760	86.47	61.01	2.60	C	1.61	25.47	66.0	17614	-0.001	1.59E-05	0.200	0.802	86.47	28.47	2.49	C	1.41	54.68
137.9	16404	0.001	1.59E-05	0.131	0.763	86.47	42.40	2.59	C	2.48	45.93	46.7	15150	-0.097	7.87E-05	0.195	0.760	86.47	-15.79	2.60	C	1.03	10.69
135.1	16399	0.008	1.93E-05	0.131	0.763	86.47	32.23	2.59	C	2.04	38.80	53.5	15968	-0.067	5.82E-05	0.195	0.773	86.47	-31.09	2.56	C	1.16	9.65
134.7	16378	0.015	2.37E-05	0.130	0.763	86.47	26.72	2.59	C	1.82	31.51	56.2	16299	-0.054	4.90E-05	0.195	0.778	86.47	-50.19	2.54	C	1.22	9.04
159.7	16368	0.026	3.35E-05	0.130	0.763	86.47	20.53	2.59	C	1.84	24.58	57.8	16576	-0.045	4.07E-05	0.195	0.782	86.47	-101.22	2.53	C	1.25	10.17
195.1	16357	0.044	4.87E-05	0.130	0.762	86.47	15.01	2.59	C	1.89	19.64	55.2	16995	-0.030	2.63E-05	0.195	0.788	86.47	198.72	2.52	C	1.18	16.36
214.7	16352	0.056	5.82E-05	0.130	0.762	86.47	12.74	2.59	C	1.92	18.52	42.5	17253	-0.021	1.55E-05	0.195	0.792	86.47	71.10	2.51	C	0.91	26.10
230.6	16340	0.070	6.87E-05	0.130	0.762	86.47	10.82	2.59	C	1.90	18.33	30.6	17356	-0.017	1.02E-05	0.194	0.793	86.47	55.52	2.51	C	0.65	33.62
263.0	16316	0.106	9.33E-05	0.129	0.762	86.47	7.80	2.59	C	1.88	18.91	15.6	17442	-0.014	5.02E-06	0.194	0.794	86.47	47.92	2.50	C	0.33	55.25
36.4	14293	-0.128	4.36E-05	0.198	0.749	86.47	-10.64	2.63	C	0.78	14.06	7.7	17487	-0.013	2.55E-06	0.195	0.795	86.47	44.80	2.50	C	0.16	86.63
35.0	14750	-0.110	3.67E-05	0.198	0.757	86.47	-13.26	2.61	C	0.78	10.98	7.9	17503	-0.012	2.61E-06	0.195	0.795	86.47	43.79	2.50	C	0.17	90.09
34.7	14955	-0.102	3.36E-05	0.198	0.760	86.47	-14.86	2.60	C	0.77	9.35	11.0	17523	-0.012	3.55E-06	0.194	0.795	86.47	42.33	2.50	C	0.23	74.64
34.0	15141	-0.094	3.06E-05	0.198	0.763	86.47	-16.71	2.59	C	0.75	9.18	30.3	17595	-0.009	8.05E-06	0.194	0.796	86.47	37.96	2.50	C	0.64	68.33
31.3	15469	-0.082	2.52E-05	0.198	0.768	86.47	-21.32	2.57	C	0.69	11.16	64.4	17764	-0.106	8.03E-05	0.207	0.763	86.47	-14.26	2.59	C	1.24	11.09
27.6	15735	-0.071	2.06E-05	0.197	0.772	86.47	-27.39	2.56	C	0.60	13.32	84.3	18757	-0.074	6.29E-05	0.207	0.776	86.47	-26.78	2.55	C	1.60	11.25
24.8	15880	-0.065	1.80E-05	0.197	0.775	86.47	-32.64	2.55	C	0.54	14.08	98.9	19181	-0.061	5.49E-05	0.207	0.782	86.47	-42.02	2.53	C	1.87	12.45
20.7	16057	-0.059	1.48E-05	0.197	0.777	86.47	-41.14	2.55	C	0.45	14.25	118.7	19549	-0.049	4.76E-05	0.207	0.786	86.47	-81.67	2.52	C	2.23	16.08
16.7	16219	-0.054	1.19E-05	0.198	0.780	86.47	-53.64	2.54	C	0.36	14.21	195.4	20152	-0.031	3.47E-05	0.207	0.794	86.47	160.41	2.50	C	3.65	37.00
15.0	16289	-0.051	1.08E-05	0.198	0.781	86.47	-61.64	2.54	C	0.33	20.83	535.7	20										

12.2	17818	-0.048	4.45E-06	0.186	0.776	86.47	-67.18	2.55	C	0.25	43.93	196.8	8164	0.087	8.97E-05	0.117	0.753	86.47	9.34	2.62	C	2.37	22.26
11.6	17848	-0.047	4.29E-06	0.186	0.777	86.47	-72.21	2.55	C	0.23	66.96	216.8	8148	0.116	1.18E-04	0.117	0.753	86.47	7.35	2.62	C	2.29	18.42
13.6	17909	-0.045	4.95E-06	0.186	0.777	86.47	-85.60	2.55	C	0.27	78.54	263.4	8141	0.172	1.70E-04	0.116	0.753	86.47	5.21	2.62	C	2.33	14.93
45.1	16001	-0.107	4.51E-05	0.190	0.753	86.47	-13.51	2.62	C	0.94	11.83	308.2	8133	0.261	2.42E-04	0.116	0.753	86.47	3.56	2.62	C	2.28	11.99
48.5	16517	-0.088	3.61E-05	0.189	0.761	86.47	-18.11	2.59	C	1.00	10.62	327.8	8129	0.319	2.84E-04	0.116	0.752	86.47	2.95	2.62	C	2.23	11.06
49.5	16738	-0.080	3.19E-05	0.189	0.764	86.47	-21.14	2.58	C	1.02	10.29	336.8	8118	0.385	3.29E-04	0.116	0.752	86.47	2.47	2.62	C	2.13	10.48
49.7	16932	-0.074	2.81E-05	0.189	0.767	86.47	-24.68	2.57	C	1.02	11.06	351.5	8094	0.551	4.30E-04	0.115	0.751	86.47	1.75	2.63	C	1.94	10.27
47.3	17255	-0.063	2.13E-05	0.189	0.772	86.47	-34.04	2.56	C	0.97	14.59	110.3	8231	0.004	4.61E-05	0.118	0.754	86.47	41.36	2.62	C	2.25	41.94
41.1	17495	-0.055	1.58E-05	0.189	0.775	86.47	-47.07	2.55	C	0.84	18.42	88.9	8228	0.021	3.41E-05	0.118	0.754	86.47	24.28	2.62	C	1.73	39.63
35.4	17614	-0.050	1.28E-05	0.189	0.777	86.47	-59.26	2.55	C	0.72	20.04	90.0	8227	0.028	3.39E-05	0.118	0.754	86.47	20.56	2.62	C	1.68	33.19
27.1	17747	-0.046	9.33E-06	0.189	0.778	86.47	-80.32	2.54	C	0.55	21.27	99.7	8226	0.036	3.75E-05	0.118	0.754	86.47	17.75	2.62	C	1.74	27.87
19.5	17853	-0.042	6.64E-06	0.189	0.780	86.47	-112.11	2.54	C	0.40	22.25	141.8	8224	0.056	5.64E-05	0.118	0.754	86.47	13.11	2.62	C	2.08	25.70
16.8	17895	-0.041	5.74E-06	0.189	0.780	86.47	-132.97	2.54	C	0.34	32.45	201.2	8221	0.087	8.97E-05	0.118	0.754	86.47	9.36	2.62	C	2.41	22.55
15.1	17932	-0.040	5.15E-06	0.189	0.781	86.47	-160.55	2.54	C	0.31	55.84	223.5	8207	0.116	1.18E-04	0.117	0.753	86.47	7.37	2.62	C	2.35	18.89
14.6	17999	-0.037	4.89E-06	0.189	0.782	86.47	-260.38	2.53	C	0.29	75.76	271.0	8200	0.172	1.70E-04	0.117	0.753	86.47	5.21	2.62	C	2.38	15.27
57.4	17222	-0.115	4.69E-05	0.200	0.755	86.47	-12.48	2.61	C	1.12	13.35	316.7	8192	0.261	2.42E-04	0.116	0.753	86.47	3.56	2.62	C	2.33	12.22
68.7	17798	-0.096	3.80E-05	0.200	0.764	86.47	-16.46	2.59	C	1.33	13.06	336.7	8188	0.319	2.85E-04	0.116	0.753	86.47	2.95	2.62	C	2.28	11.29
75.3	18048	-0.088	3.40E-05	0.200	0.767	86.47	-19.04	2.57	C	1.46	13.75	345.7	8176	0.386	3.30E-04	0.116	0.752	86.47	2.47	2.62	C	2.17	10.66
82.5	18270	-0.080	3.02E-05	0.200	0.770	86.47	-22.18	2.57	C	1.59	16.09	360.4	8152	0.552	4.32E-04	0.115	0.751	86.47	1.75	2.62	C	1.97	10.44
98.1	18646	-0.068	2.35E-05	0.199	0.775	86.47	-30.75	2.55	C	1.88	25.42	124.1	7872	0.022	5.03E-05	0.118	0.754	86.47	23.68	2.62	C	2.21	49.24
111.8	18932	-0.058	1.79E-05	0.199	0.779	86.47	-43.45	2.54	C	2.14	39.17	93.4	7869	0.040	3.41E-05	0.117	0.753	86.47	16.65	2.62	C	1.69	48.91
115.8	19080	-0.053	1.49E-05	0.198	0.780	86.47	-55.97	2.54	C	2.21	48.77	93.0	7868	0.047	3.33E-05	0.117	0.753	86.47	14.83	2.62	C	1.64	41.83
111.1	19248	-0.048	1.13E-05	0.198	0.783	86.47	-78.70	2.53	C	2.12	59.22	104.0	7866	0.055	3.73E-05	0.117	0.753	86.47	13.32	2.62	C	1.75	33.18
93.9	19389	-0.044	8.39E-06	0.198	0.784	86.47	-118.56	2.53	C	1.78	64.96	155.1	7864	0.076	5.97E-05	0.117	0.753	86.47	10.47	2.62	C	2.21	29.19
84.5	19446	-0.042	7.35E-06	0.199	0.785	86.47	-149.21	2.53	C	1.61	70.49	225.7	7862	0.109	1.00E-04	0.117	0.753	86.47	7.76	2.62	C	2.62	24.67
77.4	19497	-0.041	6.62E-06	0.198	0.786	86.47	-199.91	2.52	C	1.47	86.45	250.5	7848	0.142	1.35E-04	0.116	0.753	86.47	6.20	2.62	C	2.53	20.03
75.2	19588	-0.037	5.99E-06	0.198	0.787	86.47	-528.58	2.52	C	1.43	128.60	300.6	7839	0.207	1.99E-04	0.116	0.752	86.47	4.42	2.62	C	2.52	15.49
55.2	11501	-0.013	4.12E-05	0.128	0.755	86.47	116.71	2.61	C	1.61	24.94	346.4	7830	0.312	2.88E-04	0.116	0.752	86.47	3.02	2.62	C	2.40	11.96
103.1	11784	0.002	2.90E-05	0.127	0.761	86.47	42.10	2.59	C	1.99	32.40	365.8	7825	0.381	3.40E-04	0.116	0.752	86.47	2.50	2.62	C	2.33	10.97
99.1	11782	0.008	2.73E-05	0.127	0.761	86.47	33.39	2.59	C	1.78	28.83	374.3	7813	0.461	3.96E-04	0.115	0.752	86.47	2.08	2.62	C	2.20	10.45
104.1	11780	0.014	2.87E-05	0.127	0.761	86.47	27.76	2.59	C	1.73	25.94	388.3	7789	0.660	5.23E-04	0.114	0.751	86.47	1.47	2.63	C	1.97	10.40
138.9	11777	0.029	4.04E-05	0.127	0.760	86.47	19.71	2.60	C	1.92	24.26	128.2	8176	0.018	4.78E-05	0.119	0.754	86.47	26.30	2.61	C	2.32	52.71
194.6	11773	0.051	6.36E-05	0.127	0.760	86.47	13.79	2.60	C	2.18	21.35	99.3	8173	0.035	3.30E-05	0.119	0.754	86.47	18.15	2.61	C	1.81	51.71
214.6	11750	0.072	8.41E-05	0.126	0.760	86.47	10.71	2.60	C	2.10	17.61	100.3	8172	0.042	3.26E-05	0.119	0.754	86.47	16.06	2.62	C	1.77	44.04
262.1	11739	0.112	1.22E-04	0.126	0.760	86.47	7.49	2.60	C	2.13	14.31	113.1	8171	0.049	3.67E-05	0.119	0.754	86.47	14.34	2.62	C	1.89	35.21
308.9	11727	0.176	1.76E-04	0.126	0.759	86.47	5.05	2.60	C	2.09	11.44	168.1	8168	0.070	5.90E-05	0.118	0.754	86.47	11.12	2.62	C	2.37	31.40
329.7	11720	0.219	2.07E-04	0.126	0.759	86.47	4.17	2.60	C	2.05	10.59	240.7	8166	0.103	9.85E-05	0.118	0.754	86.47	8.14	2.62	C	2.75	26.50
338.2	11701	0.268	2.41E-04	0.125	0.759	86.47	3.46	2.60	C	1.95	9.81	267.2	8155	0.134	1.33E-04	0.118	0.754	86.47	6.47	2.62	C	2.66	21.60
352.5	11661	0.390	3.18E-04	0.124	0.758	86.47	2.43	2.60	C	1.77	9.27	315.9	8147	0.198	1.95E-04	0.118	0.754	86.47	4.58	2.62	C	2.61	16.59
60.3	11173	-0.006	3.22E-05	0.119	0.752	86.47	70.31	2.62	C	1.81	30.50	358.9	8138	0.301	2.81E-04	0.117	0.753	86.47	3.12	2.62	C	2.46	12.66
83.8	11297	0.006	2.48E-05	0.119	0.755	86.47	37.65	2.61	C	1.63	34.10	376.7	8133	0.368	3.31E-04	0.117	0.753	86.47	2.58	2.62	C	2.37	11.57
85.4	11295	0.012	2.46E-05	0.119	0.755	86.47	31.21	2.61	C	1.54	28.93	382.1	8121	0.446	3.85E-04	0.117	0.753	86.47	2.15	2.62	C	2.22	10.98
94.0	11292	0.017	2.69E-05	0.119	0.755	86.47	26.54	2.61	C	1.57	25.47	390.9	8095	0.640	5.08E-04	0.115	0.752	86.47	1.52	2.62	C	1.96	11.00
129.8	11287	0.031	3.88E-05	0.119	0.755	86.47	19.30	2.61	C	1.82	24.16	138.7	8342	0.022	4.72E-05	0.119	0.755	86.47	23.79	2.61	C	2.43	52.35
180.0	11283	0.052	5.98E-05	0.119	0.754	86.47	13.78	2.61	C	2.09	21.56	100.8	8339	0.038	3.17E-05	0.119	0.755	86.47	17.02	2.61	C	1.79	51.20
195.9	11259	0.072	7.78E-05	0.118	0.754	86.47	10.86	2.62	C	2.01	17.98	97.2	8337	0.045	3.04E-05	0.119	0.755	86.47	15.25	2.61	C	1.69	44.14
235.7	11248	0.109	1.11E-04	0.118	0.754	86.47	7.75	2.62	C	2.04	14.70	105.2	8336	0.052	3.34E-05	0.119	0.755	86.47	13.80	2.61	C	1.75	35.41
273.9	11235	0.167	1.56E-04	0.117	0.753	86.47	5.35	2.62	C	2.01	11.84	149.8	8333	0.070	5.23E-05	0.119	0.754	86.47	11.04	2.61	C	2.15	30.80
290.5	11228	0.204	1.83E-04	0.117	0.753	86.47	4.46	2.62	C	1.97	10.90	213.3	8330	0.099	8.74E-05	0.119	0.754	86.47	8.35	2.61	C	2.52	25.54
297.1	11211	0.247	2.11E-04	0.117	0.753	86.47	3.74	2.62	C	1.88	10.22	235.2	8315	0.128	1.18E-04	0.118	0.754	86.47	6.75	2.62	C	2.43	20.63
307.9	11174	0.354	2.75E-04	0.115	0.752	86.47	2.68	2.62	C	1.72	9.86	283.0	8308	0.185	1.74E-04	0.118	0.754	86.47	4.88	2.62	C	2.43	15.88
60.7	11241	-0.006	3.24E-05	0.119	0.752	86.47	70.95	2.62	C	1.81	29.85	327.7	8299	0.277	2.53E-04	0.117	0.753	86.47	3.37	2.62	C	2.34	12.27
83.9	11369	0.006	2.47E-05	0.119	0.755	86.47	37.81	2.61	C	1.63	33.42	346.9	8295	0.338	2.99E-04</								

45.4	11398	-0.013	2.61E-05	0.135	0.760	86.47	99.02	2.60	C	1.34	18.21	306.2	9681	0.340	1.74E-04	0.114	0.751	86.47	2.79	2.63	C	2.33	15.74
54.2	11509	-0.008	2.19E-05	0.135	0.762	86.47	64.53	2.59	C	1.59	20.87	302.4	9665	0.380	2.00E-04	0.113	0.750	86.47	2.50	2.63	C	2.18	13.19
77.0	11605	-0.003	2.02E-05	0.135	0.764	86.47	49.69	2.58	C	2.26	28.38	292.4	9630	0.480	2.55E-04	0.112	0.750	86.47	2.00	2.63	C	1.91	16.76
124.3	11669	0.006	2.41E-05	0.135	0.766	86.47	33.85	2.58	C	2.39	38.04	104.9	9819	0.007	5.88E-05	0.118	0.754	86.47	36.33	2.62	C	1.65	48.51
152.2	11667	0.019	3.74E-05	0.135	0.765	86.47	23.61	2.58	C	2.30	30.41	150.1	9814	0.036	7.42E-05	0.118	0.754	86.47	17.71	2.62	C	1.88	21.60
168.3	11656	0.031	5.07E-05	0.134	0.765	86.47	18.30	2.58	C	2.18	24.80	175.2	9811	0.054	8.44E-05	0.118	0.754	86.47	13.53	2.62	C	2.00	21.56
204.1	11651	0.056	7.67E-05	0.134	0.765	86.47	12.60	2.58	C	2.14	19.25	197.8	9808	0.073	9.59E-05	0.118	0.754	86.47	10.69	2.62	C	2.08	21.15
242.0	11645	0.098	1.15E-04	0.134	0.765	86.47	8.29	2.58	C	2.06	14.89	232.5	9800	0.121	1.24E-04	0.117	0.753	86.47	7.07	2.62	C	2.11	18.58
259.8	11642	0.125	1.38E-04	0.134	0.765	86.47	6.74	2.58	C	2.01	13.56	248.7	9792	0.181	1.57E-04	0.117	0.753	86.47	4.97	2.62	C	1.99	24.27
270.8	11632	0.158	1.63E-04	0.133	0.765	86.47	5.52	2.58	C	1.92	12.67	213.4	9743	0.214	6.72E-05	0.115	0.752	86.47	4.28	2.62	C	2.20	65.20
290.7	11611	0.242	2.20E-04	0.133	0.764	86.47	3.78	2.58	C	1.76	12.47	267.7	9727	0.248	1.04E-04	0.115	0.752	86.47	3.74	2.62	C	2.45	24.11
116.6	9786	0.004	3.74E-05	0.118	0.754	86.47	41.90	2.62	C	2.29	35.98	299.6	9710	0.303	1.49E-04	0.114	0.751	86.47	3.10	2.63	C	2.42	18.69
102.4	9782	0.018	2.98E-05	0.117	0.753	86.47	26.07	2.62	C	1.85	33.72	307.8	9701	0.338	1.73E-04	0.114	0.751	86.47	2.79	2.63	C	2.34	15.84
104.0	9779	0.025	2.95E-05	0.117	0.753	86.47	22.26	2.62	C	1.79	29.92	304.0	9685	0.379	1.99E-04	0.113	0.751	86.47	2.51	2.63	C	2.19	13.23
112.4	9778	0.032	3.17E-05	0.117	0.753	86.47	19.39	2.62	C	1.83	27.84	293.9	9650	0.479	2.54E-04	0.112	0.750	86.47	2.01	2.63	C	1.92	16.75
146.9	9774	0.048	4.30E-05	0.117	0.753	86.47	14.79	2.62	C	2.09	26.73	103.9	9829	0.008	5.85E-05	0.118	0.754	86.47	35.81	2.62	C	1.63	48.45
194.6	9771	0.070	6.33E-05	0.117	0.753	86.47	11.11	2.62	C	2.36	24.08	149.4	9824	0.037	7.38E-05	0.118	0.754	86.47	17.63	2.62	C	1.87	21.47
203.9	9751	0.090	8.07E-05	0.116	0.753	86.47	9.06	2.62	C	2.22	19.71	174.4	9822	0.054	8.39E-05	0.118	0.754	86.47	13.50	2.62	C	1.99	21.51
240.5	9743	0.128	1.13E-04	0.116	0.752	86.47	6.75	2.62	C	2.26	16.28	196.7	9818	0.074	9.52E-05	0.117	0.753	86.47	10.69	2.62	C	2.07	21.10
275.4	9734	0.187	1.57E-04	0.116	0.752	86.47	4.85	2.62	C	2.21	13.17	230.0	9810	0.121	1.23E-04	0.117	0.753	86.47	7.09	2.62	C	2.09	18.47
290.5	9729	0.224	1.83E-04	0.116	0.752	86.47	4.10	2.62	C	2.17	12.07	244.6	9803	0.180	1.55E-04	0.117	0.753	86.47	5.00	2.62	C	1.97	24.13
295.9	9716	0.267	2.10E-04	0.115	0.752	86.47	3.49	2.62	C	2.07	11.16	209.9	9752	0.213	6.66E-05	0.115	0.752	86.47	4.31	2.62	C	2.16	66.48
304.6	9689	0.373	2.73E-04	0.114	0.751	86.47	2.55	2.63	C	1.89	10.35	262.9	9736	0.246	1.03E-04	0.115	0.751	86.47	3.76	2.63	C	2.40	24.06
115.3	9800	0.003	3.74E-05	0.118	0.754	86.47	42.37	2.62	C	2.27	35.42	294.1	9718	0.301	1.48E-04	0.114	0.751	86.47	3.12	2.63	C	2.37	18.71
102.1	9796	0.018	2.98E-05	0.117	0.754	86.47	26.27	2.62	C	1.85	33.32	302.2	9709	0.336	1.72E-04	0.114	0.751	86.47	2.81	2.63	C	2.30	15.86
104.1	9794	0.025	2.96E-05	0.117	0.753	86.47	22.41	2.62	C	1.79	29.62	298.7	9693	0.377	1.98E-04	0.113	0.750	86.47	2.52	2.63	C	2.15	13.25
112.8	9792	0.031	3.17E-05	0.117	0.753	86.47	19.50	2.62	C	1.84	27.80	289.2	9658	0.476	2.52E-04	0.112	0.749	86.47	2.02	2.63	C	1.89	17.04
147.7	9789	0.047	4.31E-05	0.117	0.753	86.47	14.86	2.62	C	2.10	26.70	104.7	9872	0.007	5.79E-05	0.118	0.754	86.47	36.31	2.62	C	1.65	48.84
195.6	9786	0.070	6.33E-05	0.117	0.753	86.47	11.15	2.62	C	2.37	24.06	149.2	9867	0.036	7.32E-05	0.118	0.754	86.47	17.83	2.62	C	1.87	21.71
205.4	9766	0.090	8.07E-05	0.116	0.753	86.47	9.09	2.62	C	2.24	19.81	173.9	9864	0.053	8.33E-05	0.118	0.754	86.47	13.64	2.62	C	1.99	21.69
241.8	9758	0.128	1.13E-04	0.116	0.753	86.47	6.77	2.62	C	2.27	16.36	196.1	9860	0.073	9.48E-05	0.118	0.754	86.47	10.79	2.62	C	2.06	21.20
276.3	9749	0.186	1.57E-04	0.116	0.752	86.47	4.85	2.62	C	2.22	13.22	230.6	9853	0.120	1.22E-04	0.117	0.753	86.47	7.15	2.62	C	2.10	18.63
291.1	9744	0.224	1.82E-04	0.116	0.752	86.47	4.11	2.62	C	2.17	12.07	216.7	9845	0.179	1.56E-04	0.117	0.753	86.47	5.03	2.62	C	1.98	24.44
296.1	9731	0.266	2.10E-04	0.115	0.752	86.47	3.50	2.62	C	2.07	11.15	214.2	9796	0.211	6.63E-05	0.115	0.752	86.47	4.33	2.62	C	2.21	66.15
304.2	9704	0.372	2.73E-04	0.114	0.751	86.47	2.55	2.63	C	1.88	10.31	268.6	9781	0.245	1.02E-04	0.115	0.752	86.47	3.78	2.62	C	2.45	24.32
106.0	9715	0.005	5.91E-05	0.119	0.755	86.47	39.98	2.61	C	1.71	46.33	299.9	9763	0.299	1.47E-04	0.114	0.751	86.47	3.14	2.63	C	2.42	18.90
149.7	9711	0.033	7.35E-05	0.119	0.755	86.47	18.57	2.61	C	1.91	21.43	307.7	9754	0.335	1.71E-04	0.114	0.751	86.47	2.82	2.63	C	2.34	15.96
174.2	9708	0.051	8.33E-05	0.119	0.755	86.47	14.06	2.61	C	2.03	21.56	303.6	9738	0.375	1.97E-04	0.113	0.750	86.47	2.54	2.63	C	2.19	13.36
196.5	9705	0.070	9.47E-05	0.119	0.754	86.47	11.05	2.61	C	2.10	21.06	293.2	9703	0.473	2.51E-04	0.112	0.750	86.47	2.03	2.63	C	1.91	16.95
231.0	9698	0.117	1.23E-04	0.119	0.754	86.47	7.26	2.62	C	2.13	18.49	117.7	9667	0.005	3.80E-05	0.116	0.753	86.47	40.14	2.62	C	2.28	36.53
247.6	9691	0.177	1.56E-04	0.118	0.754	86.47	5.08	2.62	C	2.01	23.85	103.5	9663	0.020	3.01E-05	0.116	0.753	86.47	25.27	2.62	C	1.86	34.38
205.7	9645	0.208	6.14E-05	0.117	0.753	86.47	4.38	2.62	C	2.19	69.80	105.1	9661	0.026	2.97E-05	0.116	0.753	86.47	21.65	2.62	C	1.80	30.38
259.4	9630	0.240	9.56E-05	0.116	0.753	86.47	3.86	2.62	C	2.45	25.38	113.4	9659	0.033	3.17E-05	0.116	0.752	86.47	18.92	2.62	C	1.85	28.38
288.8	9615	0.290	1.37E-04	0.116	0.752	86.47	3.22	2.62	C	2.42	19.68	147.9	9656	0.049	4.29E-05	0.116	0.752	86.47	14.52	2.62	C	2.10	27.22
295.5	9607	0.323	1.59E-04	0.115	0.752	86.47	2.92	2.62	C	2.34	16.66	195.6	9653	0.071	6.31E-05	0.116	0.752	86.47	10.97	2.62	C	2.38	24.46
291.1	9592	0.360	1.81E-04	0.115	0.752	86.47	2.63	2.62	C	2.19	14.01	205.1	9634	0.092	8.04E-05	0.115	0.752	86.47	8.97	2.62	C	2.25	20.08
279.7	9561	0.451	2.29E-04	0.114	0.751	86.47	2.13	2.63	C	1.92	18.04	241.4	9625	0.129	1.12E-04	0.115	0.752	86.47	6.71	2.62	C	2.28	16.53
106.5	9747	0.004	5.91E-05	0.119	0.755	86.47	40.53	2.61	C	1.72	46.92	275.8	9616	0.188	1.56E-04	0.115	0.751	86.47	4.83	2.62	C	2.23	13.33
149.2	9742	0.033	7.33E-05	0.119	0.755	86.47	18.71	2.61	C	1.91	21.48	290.6	9612	0.225	1.82E-04	0.114	0.751	86.47	4.09	2.63	C	2.19	12.21
173.3	9739	0.050	8.31E-05	0.119	0.755	86.47	14.15	2.61	C	2.02	21.57	295.5	9599	0.268	2.10E-04	0.114	0.751	86.47	3.48	2.63	C	2.09	11.29
195.8	9736	0.070	9.45E-05	0.119	0.755	86.47	11.11	2.61	C	2.09	21.03	303.6	9572	0.373	2.72E-04	0.113	0.750	86.47	2.55	2.63	C	1.90	10.47
231.7	9730	0.117	1.23E-04	0.119	0.754	86.47	7.29	2.61	C	2.13	18.53	106.6	9728	0.008	6.37E-05	0.119	0.755	86.47	35.44	2.61	C	1.62	51.55
250.6	9723	0.176	1.57E-04	0.119	0.754	86.47	5.09	2.62	C	2.02	24.12	157.1	9723	0.040	8.23E-05	0.119	0.755	86.47</					

261.3	9783	0.198	1.75E-04	0.119	0.754	86.47	4.57	2.61	C	1.99	24.68	184.8	9906	0.059	1.20E-04	0.120	0.755	86.47	12.60	2.61	C	1.81	21.52
245.1	9730	0.237	9.05E-05	0.117	0.753	86.47	3.89	2.62	C	2.34	50.11	223.3	9903	0.087	1.39E-04	0.119	0.755	86.47	9.27	2.61	C	1.97	21.61
292.4	9712	0.281	1.33E-04	0.116	0.753	86.47	3.32	2.62	C	2.46	20.85	255.6	9897	0.120	1.61E-04	0.119	0.755	86.47	7.12	2.61	C	2.07	21.41
332.8	9692	0.352	1.94E-04	0.116	0.752	86.47	2.69	2.62	C	2.41	16.27	298.5	9884	0.201	2.10E-04	0.119	0.754	86.47	4.52	2.61	C	2.08	18.44
348.5	9682	0.399	2.31E-04	0.115	0.752	86.47	2.39	2.62	C	2.35	13.80	310.3	9872	0.302	2.66E-04	0.118	0.754	86.47	3.10	2.62	C	1.92	24.74
351.7	9662	0.454	2.70E-04	0.115	0.751	86.47	2.11	2.62	C	2.21	11.55	342.6	9759	0.352	6.83E-05	0.115	0.752	86.47	2.69	2.62	C	2.45	68.22
356.1	9622	0.592	3.61E-04	0.113	0.750	86.47	1.64	2.63	C	1.96	13.50	304.1	9774	0.387	1.08E-04	0.114	0.751	86.47	2.46	2.63	C	2.75	25.67
106.2	9809	0.007	6.35E-05	0.120	0.755	86.47	36.53	2.61	C	1.62	51.11	344.0	9726	0.446	1.62E-04	0.113	0.750	86.47	2.15	2.63	C	2.73	19.49
156.7	9804	0.038	8.17E-05	0.120	0.755	86.47	16.96	2.61	C	1.88	21.50	356.1	9712	0.486	1.92E-04	0.113	0.750	86.47	1.98	2.63	C	2.65	16.29
184.4	9802	0.058	9.34E-05	0.119	0.755	86.47	12.78	2.61	C	2.01	21.46	354.5	9691	0.531	2.25E-04	0.112	0.750	86.47	1.82	2.63	C	2.48	13.48
209.0	9798	0.080	1.07E-04	0.119	0.755	86.47	10.00	2.61	C	2.10	20.93	349.3	9646	0.646	2.97E-04	0.111	0.748	86.47	1.50	2.64	C	2.16	15.88
244.6	9790	0.133	1.38E-04	0.119	0.755	86.47	6.53	2.61	C	2.11	18.21	114.7	9942	0.014	8.56E-05	0.120	0.755	86.47	29.20	2.61	C	1.45	58.05
258.6	9782	0.200	1.76E-04	0.119	0.754	86.47	4.55	2.61	C	1.97	24.00	185.7	9936	0.058	1.19E-04	0.120	0.755	86.47	12.70	2.61	C	1.82	21.86
242.6	9728	0.238	9.06E-05	0.117	0.753	86.47	3.87	2.62	C	2.31	50.28	224.4	9933	0.087	1.39E-04	0.120	0.755	86.47	9.33	2.61	C	1.98	21.89
292.0	9710	0.282	1.34E-04	0.116	0.753	86.47	3.31	2.62	C	2.45	20.76	256.6	9927	0.119	1.61E-04	0.119	0.755	86.47	7.16	2.61	C	2.08	21.76
333.7	9690	0.354	1.95E-04	0.116	0.752	86.47	2.68	2.62	C	2.42	16.25	299.1	9913	0.200	2.10E-04	0.119	0.754	86.47	4.54	2.61	C	2.08	18.61
349.8	9680	0.401	2.32E-04	0.115	0.752	86.47	2.38	2.62	C	2.35	13.78	310.5	9900	0.301	2.65E-04	0.118	0.754	86.47	3.11	2.62	C	1.91	25.02
353.2	9661	0.456	2.71E-04	0.115	0.751	86.47	2.10	2.63	C	2.21	11.53	240.7	9807	0.351	6.80E-05	0.115	0.752	86.47	2.70	2.62	C	2.43	67.94
357.6	9620	0.594	3.62E-04	0.113	0.750	86.47	1.63	2.63	C	1.96	13.53	302.0	9782	0.386	1.08E-04	0.114	0.751	86.47	2.47	2.63	C	2.73	25.85
106.9	9838	0.006	6.35E-05	0.120	0.755	86.47	37.20	2.61	C	1.64	51.31	341.9	9754	0.445	1.61E-04	0.113	0.750	86.47	2.16	2.63	C	2.71	19.56
156.4	9832	0.038	8.15E-05	0.120	0.755	86.47	17.12	2.61	C	1.88	21.62	354.0	9740	0.484	1.91E-04	0.113	0.750	86.47	1.99	2.63	C	2.63	16.36
183.7	9830	0.057	9.31E-05	0.120	0.755	86.47	12.88	2.61	C	2.01	21.50	352.4	9718	0.529	2.24E-04	0.112	0.750	86.47	1.82	2.63	C	2.46	13.53
208.1	9826	0.079	1.06E-04	0.119	0.755	86.47	10.07	2.61	C	2.09	20.97	347.0	9673	0.643	2.96E-04	0.111	0.748	86.47	1.51	2.64	C	2.15	15.92
244.7	9818	0.132	1.38E-04	0.119	0.755	86.47	6.56	2.61	C	2.11	18.31	114.6	9942	0.014	8.57E-05	0.120	0.755	86.47	29.07	2.61	C	1.45	57.45
260.6	9810	0.199	1.75E-04	0.119	0.755	86.47	4.57	2.61	C	1.98	24.30	185.4	9936	0.058	1.19E-04	0.120	0.755	86.47	12.67	2.61	C	1.81	21.74
238.2	9757	0.237	8.91E-05	0.117	0.753	86.47	3.89	2.62	C	2.28	52.27	223.7	9933	0.087	1.39E-04	0.119	0.755	86.47	9.32	2.61	C	1.98	21.87
291.2	9739	0.281	1.33E-04	0.116	0.753	86.47	3.33	2.62	C	2.44	20.84	255.8	9927	0.119	1.60E-04	0.119	0.755	86.47	7.15	2.61	C	2.07	21.68
334.5	9719	0.352	1.95E-04	0.116	0.752	86.47	2.69	2.62	C	2.42	16.34	297.9	9914	0.200	2.09E-04	0.119	0.754	86.47	4.54	2.61	C	2.08	18.61
350.7	9709	0.399	2.31E-04	0.115	0.752	86.47	2.39	2.62	C	2.36	13.83	309.0	9902	0.301	2.65E-04	0.118	0.754	86.47	3.12	2.62	C	1.91	24.93
353.1	9689	0.454	2.70E-04	0.115	0.751	86.47	2.11	2.62	C	2.21	11.53	241.7	9807	0.350	6.85E-05	0.115	0.752	86.47	2.70	2.62	C	2.44	66.96
355.4	9648	0.591	3.59E-04	0.113	0.750	86.47	1.64	2.63	C	1.95	13.70	298.8	9781	0.386	1.08E-04	0.114	0.751	86.47	2.47	2.63	C	2.70	25.59
114.5	9880	0.014	8.64E-05	0.120	0.755	86.47	28.85	2.61	C	1.45	57.07	337.0	9752	0.444	1.61E-04	0.113	0.750	86.47	2.16	2.63	C	2.67	19.34
186.0	9874	0.059	1.20E-04	0.120	0.755	86.47	12.56	2.61	C	1.82	21.69	349.0	9737	0.483	1.91E-04	0.113	0.750	86.47	1.99	2.63	C	2.59	16.20
224.8	9871	0.088	1.41E-04	0.120	0.755	86.47	9.23	2.61	C	1.99	21.54	349.0	9716	0.529	2.24E-04	0.112	0.749	86.47	1.83	2.63	C	2.44	13.42
257.4	9865	0.121	1.62E-04	0.119	0.755	86.47	7.08	2.61	C	2.08	21.53	346.5	9671	0.643	2.96E-04	0.111	0.748	86.47	1.51	2.64	C	2.14	15.82
300.5	9852	0.202	2.12E-04	0.119	0.755	86.47	4.49	2.61	C	2.09	18.48	114.1	9965	0.014	8.53E-05	0.120	0.755	86.47	29.24	2.61	C	1.45	57.93
312.1	9840	0.305	2.69E-04	0.118	0.754	86.47	3.08	2.62	C	1.92	24.74	184.1	9959	0.058	1.18E-04	0.120	0.755	86.47	12.74	2.61	C	1.80	21.69
249.6	9748	0.355	6.88E-05	0.115	0.752	86.47	2.67	2.62	C	2.53	70.66	222.1	9956	0.086	1.38E-04	0.119	0.755	86.47	9.37	2.61	C	1.97	21.69
309.1	9723	0.390	1.09E-04	0.114	0.751	86.47	2.44	2.63	C	2.79	26.48	254.1	9949	0.119	1.60E-04	0.119	0.755	86.47	7.19	2.61	C	2.06	21.53
346.6	9695	0.450	1.63E-04	0.113	0.751	86.47	2.13	2.63	C	2.75	19.91	296.7	9936	0.199	2.09E-04	0.119	0.754	86.47	4.56	2.61	C	2.07	18.48
357.6	9681	0.490	1.94E-04	0.113	0.750	86.47	1.97	2.63	C	2.65	16.56	308.9	9924	0.299	2.64E-04	0.118	0.754	86.47	3.13	2.62	C	1.91	24.88
355.1	9660	0.536	2.27E-04	0.112	0.750	86.47	1.80	2.63	C	2.48	13.69	233.5	9829	0.349	6.73E-05	0.115	0.752	86.47	2.71	2.62	C	2.36	68.16
348.6	9615	0.651	3.00E-04	0.111	0.748	86.47	1.49	2.64	C	2.15	16.25	293.7	9804	0.384	1.07E-04	0.114	0.751	86.47	2.48	2.63	C	2.65	25.18
114.8	9907	0.014	8.62E-05	0.120	0.755	86.47	29.08	2.61	C	1.45	57.15	335.7	9776	0.442	1.60E-04	0.113	0.750	86.47	2.17	2.63	C	2.66	19.10
185.9	9901	0.059	1.20E-04	0.120	0.755	86.47	12.62	2.61	C	1.82	21.67	349.7	9761	0.481	1.91E-04	0.113	0.750	86.47	2.00	2.63	C	2.60	16.11
224.5	9898	0.087	1.40E-04	0.120	0.755	86.47	9.27	2.61	C	1.98	21.74	350.8	9740	0.526	2.23E-04	0.112	0.749	86.47	1.83	2.63	C	2.45	13.39
256.9	9892	0.120	1.62E-04	0.119	0.755	86.47	7.11	2.61	C	2.08	21.63	350.1	9695	0.640	2.94E-04	0.111	0.748	86.47	1.52	2.64	C	2.17	15.96
299.7	9879	0.202	2.11E-04	0.119	0.755	86.47	4.51	2.61	C	2.08	18.56	114.8	9967	0.014	8.54E-05	0.120	0.755	86.47	29.10	2.61	C	1.45	56.99
311.3	9866	0.303	2.68E-04	0.118	0.754	86.47	3.09	2.62	C	1.92	24.82	184.7	9961	0.058	1.19E-04	0.119	0.755	86.47	12.70	2.61	C	1.81	21.67
248.1	9775	0.353	6.91E-05	0.115	0.752	86.47	2.68	2.62	C	2.50	68.75	222.7	9958	0.087	1.38E-04	0.119	0.755	86.47	9.34	2.61	C	1.97	21.75
305.4	9750	0.389	1.09E-04	0.115	0.751	86.47	2.45	2.63	C	2.76	26.02	254.7	9952	0.119	1.60E-04	0.119	0.755	86.47	7.17	2.61	C	2.06	21.57
344.8	9722	0.448	1.62E-04	0.114	0.751	86.47	2.14	2.63	C	2.73	19.65	298.1	9939	0.199	2.09E-04	0.119	0.754	86.47	4.55	2.61	C	2.08	18.58
357.8	9708	0.487	1.93E-04	0.113	0.750	86.47	1.97	2.63	C	2.66	16.48	311.0	9926	0.300	2.64E-04	0.118	0.754	86.47	3.13	2.62	C	1.92	

292.4	9700	0.223	1.82E-04	0.115	0.752	86.47	4.12	2.62	C	2.19	12.24	253.4	8424	0.229	1.92E-04	0.118	0.754	86.47	4.02	2.62	C	2.04	25.06
297.7	9687	0.266	2.09E-04	0.114	0.751	86.47	3.51	2.63	C	2.09	11.34	232.0	8385	0.269	8.99E-05	0.117	0.753	86.47	3.46	2.62	C	2.46	54.03
306.3	9660	0.371	2.72E-04	0.114	0.751	86.47	2.56	2.63	C	1.90	10.51	276.8	8373	0.313	1.34E-04	0.116	0.753	86.47	3.00	2.62	C	2.58	21.27
117.3	9761	0.005	3.78E-05	0.117	0.753	86.47	40.51	2.62	C	2.27	36.80	319.0	8360	0.384	1.95E-04	0.116	0.752	86.47	2.47	2.62	C	2.57	16.74
102.3	9756	0.019	2.98E-05	0.117	0.753	86.47	25.48	2.62	C	1.83	34.39	337.5	8353	0.431	2.30E-04	0.115	0.752	86.47	2.22	2.62	C	2.53	14.41
103.4	9754	0.026	2.94E-05	0.116	0.753	86.47	21.84	2.62	C	1.77	30.43	345.1	8339	0.485	2.68E-04	0.115	0.752	86.47	1.98	2.62	C	2.41	12.32
111.3	9752	0.033	3.13E-05	0.116	0.753	86.47	19.09	2.62	C	1.81	28.11	358.6	8311	0.621	3.53E-04	0.114	0.751	86.47	1.56	2.63	C	2.20	14.48
145.0	9749	0.048	4.23E-05	0.116	0.753	86.47	14.67	2.62	C	2.06	26.97	110.0	8469	0.017	7.24E-05	0.120	0.755	86.47	27.04	2.61	C	1.66	49.34
192.3	9746	0.070	6.21E-05	0.116	0.753	86.47	11.10	2.62	C	2.34	24.41	152.7	8465	0.052	9.10E-05	0.119	0.755	86.47	13.81	2.61	C	1.89	21.72
202.1	9726	0.090	7.93E-05	0.115	0.752	86.47	9.08	2.62	C	2.22	20.06	176.5	8463	0.073	1.03E-04	0.119	0.755	86.47	10.66	2.61	C	2.00	21.62
238.5	9718	0.128	1.11E-04	0.115	0.752	86.47	6.79	2.62	C	2.25	16.43	198.4	8460	0.097	1.18E-04	0.119	0.755	86.47	8.49	2.61	C	2.08	21.04
273.4	9709	0.185	1.54E-04	0.115	0.752	86.47	4.89	2.62	C	2.21	13.31	234.2	8454	0.156	1.52E-04	0.119	0.755	86.47	5.67	2.61	C	2.13	18.52
288.5	9704	0.222	1.80E-04	0.115	0.751	86.47	4.14	2.62	C	2.17	12.20	254.8	8448	0.230	1.94E-04	0.119	0.754	86.47	4.00	2.61	C	2.04	24.80
294.1	9691	0.264	2.07E-04	0.114	0.751	86.47	3.53	2.63	C	2.07	11.34	236.3	8407	0.271	9.28E-05	0.117	0.753	86.47	3.44	2.62	C	2.48	48.48
303.2	9664	0.368	2.69E-04	0.113	0.750	86.47	2.58	2.63	C	1.89	10.56	272.6	8394	0.315	1.35E-04	0.117	0.753	86.47	2.98	2.62	C	2.53	20.64
118.0	9745	0.004	3.78E-05	0.117	0.753	86.47	41.69	2.62	C	2.31	35.03	312.3	8379	0.387	1.95E-04	0.116	0.752	86.47	2.46	2.62	C	2.51	16.24
103.1	9741	0.019	2.99E-05	0.117	0.753	86.47	25.92	2.62	C	1.86	33.02	331.2	8372	0.434	2.31E-04	0.116	0.752	86.47	2.21	2.62	C	2.47	14.05
104.5	9739	0.025	2.96E-05	0.117	0.753	86.47	22.14	2.62	C	1.80	29.58	341.5	8359	0.488	2.70E-04	0.115	0.752	86.47	1.97	2.62	C	2.38	12.06
112.8	9737	0.032	3.17E-05	0.117	0.753	86.47	19.30	2.62	C	1.84	27.68	360.8	8332	0.625	3.59E-04	0.114	0.751	86.47	1.55	2.63	C	2.19	13.73
147.2	9734	0.048	4.30E-05	0.117	0.753	86.47	14.74	2.62	C	2.09	26.78	109.7	8502	0.016	7.23E-05	0.120	0.755	86.47	27.49	2.61	C	1.66	50.41
195.1	9731	0.070	6.33E-05	0.117	0.753	86.47	11.09	2.62	C	2.37	24.12	152.1	8498	0.051	9.08E-05	0.120	0.755	86.47	13.94	2.61	C	1.88	21.89
203.8	9711	0.091	8.09E-05	0.116	0.753	86.47	9.04	2.62	C	2.22	19.61	176.0	8496	0.073	1.03E-04	0.120	0.755	86.47	10.74	2.61	C	2.00	21.74
240.3	9702	0.129	1.13E-04	0.116	0.752	86.47	6.74	2.62	C	2.26	16.22	198.2	8494	0.097	1.18E-04	0.120	0.755	86.47	8.54	2.61	C	2.08	21.12
275.2	9693	0.187	1.57E-04	0.116	0.752	86.47	4.83	2.62	C	2.21	13.13	234.9	8488	0.155	1.53E-04	0.119	0.755	86.47	5.69	2.61	C	2.13	18.57
290.3	9688	0.225	1.83E-04	0.115	0.752	86.47	4.09	2.62	C	2.17	12.03	256.8	8482	0.229	1.95E-04	0.119	0.755	86.47	4.01	2.61	C	2.05	25.16
295.8	9676	0.268	2.11E-04	0.115	0.752	86.47	3.48	2.62	C	2.07	11.09	236.4	8442	0.270	9.15E-05	0.118	0.754	86.47	3.45	2.62	C	2.48	51.26
304.8	9648	0.374	2.75E-04	0.114	0.751	86.47	2.54	2.63	C	1.89	10.21	274.6	8429	0.314	1.34E-04	0.117	0.753	86.47	2.99	2.62	C	2.55	20.89
116.1	9747	0.004	3.79E-05	0.117	0.753	86.47	41.40	2.62	C	2.26	35.05	314.5	8415	0.385	1.95E-04	0.116	0.753	86.47	2.47	2.62	C	2.52	16.37
101.6	9743	0.019	2.99E-05	0.117	0.753	86.47	25.78	2.62	C	1.83	32.90	333.1	8407	0.432	2.30E-04	0.116	0.753	86.47	2.21	2.62	C	2.48	14.12
103.0	9740	0.025	2.96E-05	0.117	0.753	86.47	22.03	2.62	C	1.77	29.54	342.4	8394	0.487	2.69E-04	0.116	0.752	86.47	1.97	2.62	C	2.38	12.06
111.4	9739	0.032	3.16E-05	0.117	0.753	86.47	19.22	2.62	C	1.81	27.59	359.7	8367	0.623	3.58E-04	0.115	0.751	86.47	1.56	2.63	C	2.18	13.97
146.0	9735	0.048	4.30E-05	0.117	0.753	86.47	14.70	2.62	C	2.08	26.71	111.2	8443	0.019	7.35E-05	0.119	0.755	86.47	25.13	2.61	C	1.65	50.26
194.0	9732	0.070	6.33E-05	0.117	0.753	86.47	11.07	2.62	C	2.35	24.07	153.2	8439	0.055	9.20E-05	0.119	0.755	86.47	13.21	2.61	C	1.88	21.97
204.2	9713	0.091	8.08E-05	0.116	0.753	86.47	9.03	2.62	C	2.23	19.81	176.7	8437	0.077	1.05E-04	0.119	0.755	86.47	10.27	2.61	C	1.99	21.77
240.5	9705	0.129	1.13E-04	0.116	0.752	86.47	6.73	2.62	C	2.26	16.29	198.7	8434	0.101	1.19E-04	0.119	0.754	86.47	8.22	2.61	C	2.07	21.25
274.9	9695	0.187	1.57E-04	0.116	0.752	86.47	4.83	2.62	C	2.21	13.12	235.1	8428	0.160	1.54E-04	0.119	0.754	86.47	5.53	2.62	C	2.13	18.68
289.7	9690	0.225	1.84E-04	0.115	0.752	86.47	4.09	2.62	C	2.16	12.04	257.0	8422	0.235	1.96E-04	0.118	0.754	86.47	3.92	2.62	C	2.05	25.32
295.1	9678	0.268	2.12E-04	0.115	0.752	86.47	3.48	2.62	C	2.06	11.12	240.3	8381	0.277	9.49E-05	0.117	0.753	86.47	3.37	2.62	C	2.51	51.22
304.0	9651	0.375	2.75E-04	0.114	0.751	86.47	2.54	2.63	C	1.88	10.29	279.2	8368	0.322	1.38E-04	0.116	0.753	86.47	2.92	2.62	C	2.57	20.96
115.9	9757	0.004	3.78E-05	0.117	0.753	86.47	41.47	2.62	C	2.26	34.99	319.4	8353	0.396	2.01E-04	0.116	0.752	86.47	2.41	2.62	C	2.54	16.48
101.8	9752	0.019	2.99E-05	0.117	0.753	86.47	25.84	2.62	C	1.84	33.03	337.9	8346	0.444	2.38E-04	0.115	0.752	86.47	2.16	2.62	C	2.49	14.12
103.5	9750	0.025	2.96E-05	0.117	0.753	86.47	22.09	2.62	C	1.78	29.50	346.9	8333	0.500	2.79E-04	0.115	0.751	86.47	1.92	2.62	C	2.38	12.06
112.0	9749	0.032	3.16E-05	0.117	0.753	86.47	19.26	2.62	C	1.83	27.76	363.5	8305	0.642	3.71E-04	0.114	0.751	86.47	1.51	2.63	C	2.17	13.98
147.0	9746	0.048	4.30E-05	0.117	0.753	86.47	14.73	2.62	C	2.09	26.67	110.2	8451	0.019	7.31E-05	0.119	0.755	86.47	25.22	2.61	C	1.64	50.14
195.4	9743	0.070	6.33E-05	0.117	0.753	86.47	11.08	2.62	C	2.37	24.20	152.6	8447	0.055	9.18E-05	0.119	0.755	86.47	13.26	2.61	C	1.87	21.67
205.4	9723	0.091	8.08E-05	0.116	0.753	86.47	9.04	2.62	C	2.24	19.89	176.3	8445	0.077	1.04E-04	0.119	0.755	86.47	10.31	2.61	C	1.99	21.51
241.5	9714	0.129	1.13E-04	0.116	0.752	86.47	6.74	2.62	C	2.27	16.27	198.0	8441	0.101	1.19E-04	0.119	0.755	86.47	8.25	2.61	C	2.07	20.89
275.7	9705	0.187	1.57E-04	0.116	0.752	86.47	4.83	2.62	C	2.21	13.16	233.6	8435	0.160	1.53E-04	0.119	0.754	86.47	5.55	2.62	C	2.12	18.38
290.3	9700	0.225	1.84E-04	0.116	0.752	86.47	4.09	2.62	C	2.17	12.02	254.4	8429	0.234	1.95E-04	0.118	0.754	86.47	3.94	2.62	C	2.04	24.83
295.5	9687	0.268	2.11E-04	0.115	0.752	86.47	3.48	2.62	C	2.06	11.10	236.1	8389	0.275	9.32E-05	0.117	0.753	86.47	3.39	2.62	C	2.48	53.75
303.9	9659	0.374	2.75E-04	0.114	0.751	86.47	2.54	2.63	C	1.88	10.26	276.5	8375	0.320	1.37E-04	0.116	0.753	86.47	2.94	2.62	C	2.55	21.22
115.9	9766	0.004	3.76E-05	0.118	0.754	86.47	41.74	2.62	C	2.27	35.73	317.3	8360	0.394	2.00E-04	0.116	0.752	86.47	2.42	2.62	C	2.52	16.62
102.1	9762	0.018	2.99E-05	0.117	0.753	86.47	25.97	2.62	C	1.84	33.58	335.9	8352	0.442	2.38E-04	0.115	0.752	86.47	2.17	2.6			

154.2	8493	0.055	9.18E-05	0.119	0.755	86.47	13.31	2.61	C	1.89	21.94	370.9	8363	0.538	1.87E-04	0.113	0.750	86.47	1.80	2.63	C	3.14	20.92
178.7	8491	0.076	1.04E-04	0.119	0.755	86.47	10.34	2.61	C	2.01	21.78	367.8	8348	0.581	2.15E-04	0.113	0.750	86.47	1.66	2.63	C	2.94	17.46
201.0	8488	0.101	1.19E-04	0.119	0.755	86.47	8.27	2.61	C	2.09	21.15	357.0	8319	0.689	2.76E-04	0.111	0.749	86.47	1.41	2.63	C	2.56	21.28
236.6	8482	0.160	1.54E-04	0.119	0.755	86.47	5.55	2.61	C	2.13	18.53	123.6	8516	0.031	1.04E-04	0.119	0.755	86.47	19.60	2.61	C	1.51	54.81
255.8	8476	0.234	1.96E-04	0.119	0.754	86.47	3.94	2.61	C	2.04	24.98	184.7	8512	0.082	1.35E-04	0.119	0.755	86.47	9.73	2.61	C	1.85	22.19
236.5	8435	0.275	9.27E-05	0.117	0.753	86.47	3.39	2.62	C	2.48	54.09	219.4	8510	0.114	1.56E-04	0.119	0.755	86.47	7.42	2.61	C	2.01	22.25
275.1	8422	0.320	1.37E-04	0.117	0.753	86.47	2.94	2.62	C	2.53	21.11	249.8	8505	0.151	1.79E-04	0.119	0.754	86.47	5.84	2.61	C	2.11	21.81
315.9	8407	0.393	2.00E-04	0.116	0.752	86.47	2.42	2.62	C	2.51	16.53	295.3	8495	0.241	2.35E-04	0.118	0.754	86.47	3.83	2.62	C	2.15	18.79
335.0	8400	0.441	2.37E-04	0.116	0.752	86.47	2.17	2.62	C	2.47	14.19	315.8	8485	0.355	3.02E-04	0.118	0.754	86.47	2.67	2.62	C	2.02	26.01
344.9	8387	0.497	2.77E-04	0.115	0.752	86.47	1.93	2.62	C	2.37	12.11	250.1	8415	0.408	6.21E-05	0.115	0.752	86.47	2.34	2.62	C	2.93	89.45
363.6	8359	0.638	3.69E-04	0.114	0.751	86.47	1.52	2.63	C	2.17	14.39	326.5	8396	0.441	1.05E-04	0.114	0.751	86.47	2.17	2.63	C	3.36	33.42
127.2	8411	0.030	1.08E-04	0.120	0.755	86.47	19.77	2.61	C	1.54	55.60	363.0	8376	0.499	1.58E-04	0.114	0.751	86.47	1.93	2.63	C	3.27	25.00
189.9	8406	0.084	1.41E-04	0.120	0.755	86.47	9.57	2.61	C	1.88	22.68	369.9	8366	0.537	1.86E-04	0.113	0.750	86.47	1.80	2.63	C	3.13	20.95
225.6	8404	0.117	1.63E-04	0.119	0.755	86.47	7.25	2.61	C	2.04	22.72	364.6	8352	0.581	2.15E-04	0.113	0.750	86.47	1.67	2.63	C	2.91	17.33
256.8	8399	0.156	1.88E-04	0.119	0.755	86.47	5.68	2.61	C	2.14	22.32	350.4	8322	0.689	2.77E-04	0.111	0.749	86.47	1.41	2.63	C	2.51	20.75
303.8	8389	0.250	2.47E-04	0.119	0.754	86.47	3.70	2.61	C	2.17	19.17	124.4	8529	0.031	1.04E-04	0.119	0.755	86.47	19.58	2.61	C	1.51	55.12
325.3	8379	0.370	3.19E-04	0.118	0.754	86.47	2.56	2.62	C	2.04	26.43	184.5	8525	0.082	1.35E-04	0.119	0.755	86.47	9.73	2.61	C	1.84	22.25
240.9	8309	0.426	6.60E-05	0.116	0.752	86.47	2.24	2.62	C	2.83	108.30	218.6	8522	0.114	1.56E-04	0.119	0.755	86.47	7.42	2.61	C	2.00	22.22
352.9	8291	0.464	1.24E-04	0.115	0.752	86.47	2.07	2.62	C	3.49	34.41	248.6	8518	0.151	1.79E-04	0.119	0.754	86.47	5.85	2.61	C	2.10	21.68
401.1	8270	0.532	1.90E-04	0.114	0.751	86.47	1.81	2.63	C	3.38	25.51	294.0	8507	0.241	2.35E-04	0.118	0.754	86.47	3.83	2.62	C	2.14	18.68
407.1	8259	0.578	2.24E-04	0.114	0.751	86.47	1.67	2.63	C	3.21	21.12	315.3	8498	0.355	3.03E-04	0.118	0.754	86.47	2.67	2.62	C	2.02	25.94
400.0	8245	0.631	2.58E-04	0.113	0.750	86.47	1.54	2.63	C	2.96	17.44	246.6	8427	0.408	6.19E-05	0.115	0.752	86.47	2.34	2.62	C	2.89	88.41
378.0	8217	0.758	3.26E-04	0.112	0.749	86.47	1.29	2.63	C	2.50	22.71	324.8	8409	0.442	1.05E-04	0.114	0.751	86.47	2.17	2.63	C	3.34	33.37
126.2	8411	0.030	1.08E-04	0.120	0.755	86.47	19.79	2.61	C	1.52	55.74	363.9	8388	0.499	1.58E-04	0.114	0.751	86.47	1.93	2.63	C	3.28	25.09
189.0	8407	0.084	1.42E-04	0.120	0.755	86.47	9.56	2.61	C	1.87	22.46	372.0	8378	0.537	1.86E-04	0.113	0.750	86.47	1.80	2.63	C	3.15	21.02
225.0	8404	0.118	1.64E-04	0.120	0.755	86.47	7.24	2.61	C	2.03	22.43	368.0	8364	0.581	2.15E-04	0.113	0.750	86.47	1.67	2.63	C	2.94	17.46
256.6	8399	0.156	1.89E-04	0.119	0.755	86.47	5.67	2.61	C	2.13	21.98	355.8	8335	0.688	2.77E-04	0.111	0.749	86.47	1.41	2.63	C	2.55	20.84
304.8	8389	0.251	2.49E-04	0.119	0.755	86.47	3.69	2.61	C	2.18	18.94	126.1	8370	0.022	5.29E-05	0.118	0.754	86.47	23.65	2.62	C	2.11	39.65
327.5	8379	0.372	3.21E-04	0.118	0.754	86.47	2.55	2.62	C	2.05	26.22	104.5	8366	0.042	3.98E-05	0.118	0.754	86.47	16.12	2.62	C	1.73	37.02
234.1	8311	0.427	6.41E-05	0.116	0.752	86.47	2.24	2.62	C	2.77	120.40	105.6	8364	0.051	3.94E-05	0.118	0.754	86.47	14.14	2.62	C	1.70	31.38
350.5	8293	0.465	1.26E-04	0.115	0.752	86.47	2.06	2.62	C	3.45	34.26	115.9	8363	0.060	4.30E-05	0.118	0.754	86.47	12.56	2.62	C	1.78	27.21
399.7	8272	0.535	1.93E-04	0.114	0.751	86.47	1.80	2.63	C	3.35	25.39	160.4	8360	0.082	6.23E-05	0.118	0.754	86.47	9.80	2.62	C	2.14	25.73
406.3	8262	0.582	2.27E-04	0.114	0.751	86.47	1.66	2.63	C	3.18	21.02	223.2	8358	0.115	9.68E-05	0.117	0.754	86.47	7.39	2.62	C	2.49	22.86
399.2	8248	0.635	2.60E-04	0.113	0.750	86.47	1.53	2.63	C	2.94	17.39	242.1	8341	0.146	1.26E-04	0.117	0.753	86.47	6.01	2.62	C	2.40	18.88
377.1	8219	0.763	3.26E-04	0.112	0.749	86.47	1.28	2.63	C	2.50	23.84	290.2	8332	0.206	1.81E-04	0.116	0.753	86.47	4.42	2.62	C	2.43	15.24
125.6	8409	0.030	1.09E-04	0.120	0.755	86.47	19.73	2.61	C	1.51	55.95	336.1	8323	0.301	2.56E-04	0.116	0.752	86.47	3.12	2.62	C	2.38	12.13
189.4	8404	0.084	1.42E-04	0.120	0.755	86.47	9.53	2.61	C	1.87	22.43	356.0	8318	0.362	3.00E-04	0.116	0.752	86.47	2.62	2.62	C	2.32	11.19
225.7	8402	0.118	1.64E-04	0.120	0.755	86.47	7.22	2.61	C	2.03	22.36	364.1	8306	0.432	3.47E-04	0.115	0.752	86.47	2.21	2.62	C	2.21	10.57
257.6	8397	0.156	1.89E-04	0.119	0.755	86.47	5.65	2.61	C	2.13	21.96	377.6	8279	0.606	4.54E-04	0.114	0.751	86.47	1.60	2.63	C	2.00	10.38
304.9	8386	0.252	2.50E-04	0.119	0.755	86.47	3.67	2.61	C	2.17	18.80	123.0	8539	0.030	1.04E-04	0.119	0.755	86.47	19.71	2.61	C	1.50	55.17
325.4	8376	0.373	3.22E-04	0.119	0.754	86.47	2.54	2.62	C	2.03	25.98	182.4	8534	0.082	1.35E-04	0.119	0.755	86.47	9.77	2.61	C	1.82	22.19
203.3	8305	0.428	6.05E-05	0.116	0.752	86.47	2.23	2.62	C	2.44	140.60	216.1	8532	0.114	1.55E-04	0.119	0.755	86.47	7.45	2.61	C	1.98	22.14
334.1	8286	0.466	1.27E-04	0.115	0.752	86.47	2.06	2.62	C	3.28	34.07	245.5	8527	0.150	1.79E-04	0.119	0.754	86.47	5.86	2.61	C	2.07	21.60
392.0	8265	0.537	1.98E-04	0.114	0.751	86.47	1.80	2.63	C	3.25	25.31	290.1	8517	0.240	2.35E-04	0.118	0.754	86.47	3.84	2.62	C	2.11	18.57
400.3	8254	0.584	2.32E-04	0.114	0.751	86.47	1.66	2.63	C	3.10	21.03	310.9	8506	0.354	3.02E-04	0.118	0.754	86.47	2.67	2.62	C	1.99	25.90
394.1	8240	0.639	2.64E-04	0.113	0.750	86.47	1.52	2.63	C	2.88	17.46	241.4	8436	0.407	6.14E-05	0.115	0.752	86.47	2.34	2.62	C	2.83	90.51
370.7	8211	0.768	3.27E-04	0.112	0.749	86.47	1.27	2.63	C	2.45	25.70	319.1	8418	0.440	1.05E-04	0.114	0.751	86.47	2.18	2.63	C	3.29	33.37
125.5	8475	0.031	1.05E-04	0.119	0.755	86.47	19.47	2.61	C	1.53	55.73	357.3	8397	0.497	1.57E-04	0.114	0.751	86.47	1.94	2.63	C	3.22	25.19
185.7	8470	0.083	1.37E-04	0.119	0.755	86.47	9.64	2.61	C	1.85	22.55	364.9	8387	0.535	1.85E-04	0.113	0.750	86.47	1.80	2.63	C	3.10	21.01
219.6	8468	0.116	1.57E-04	0.119	0.754	86.47	7.35	2.61	C	2.01	22.56	359.3	8372	0.579	2.13E-04	0.113	0.750	86.47	1.67	2.63	C	2.88	17.39
249.2	8463	0.152	1.81E-04	0.119	0.754	86.47	5.79	2.62	C	2.10	22.06	344.5	8342	0.685	2.73E-04	0.111	0.749	86.47	1.42	2.63	C	2.48	21.13
293.6	8453	0.243	2.38E-04	0.118	0.754	86.47	3.79	2.62	C	2.13	18.95	123.9	8395	0.021	5.17E-05	0.118	0.754	86.47	24.30	2.62	C	2.10	40.12
314.2	8443	0.358	3.05E-04	0.118	0.754	86.47	2.64	2.62	C	2.01	26.32	103.8	8392	0.040	3.94E-05	0.118	0.754	86.47	16.51	2.62	C	1.73	

221.6	8448	0.111	9.46E-05	0.118	0.754	86.47	7.61	2.62	C	2.49	22.99
239.4	8430	0.142	1.23E-04	0.118	0.754	86.47	6.18	2.62	C	2.38	18.96
287.5	8422	0.200	1.76E-04	0.117	0.753	86.47	4.54	2.62	C	2.42	15.37
334.1	8412	0.292	2.49E-04	0.117	0.753	86.47	3.21	2.62	C	2.38	12.30
354.6	8408	0.351	2.92E-04	0.117	0.753	86.47	2.69	2.62	C	2.33	11.37
363.5	8395	0.420	3.38E-04	0.116	0.753	86.47	2.27	2.62	C	2.22	10.74
378.2	8369	0.590	4.42E-04	0.115	0.752	86.47	1.64	2.62	C	2.01	10.56
123.2	8486	0.020	5.11E-05	0.119	0.754	86.47	24.81	2.61	C	2.09	40.19
101.9	8483	0.039	3.87E-05	0.119	0.754	86.47	16.82	2.62	C	1.71	37.01
103.1	8481	0.048	3.84E-05	0.118	0.754	86.47	14.72	2.62	C	1.67	31.26
113.1	8480	0.056	4.20E-05	0.118	0.754	86.47	13.05	2.62	C	1.75	27.27
156.2	8477	0.078	6.09E-05	0.118	0.754	86.47	10.15	2.62	C	2.09	25.69
217.0	8474	0.111	9.44E-05	0.118	0.754	86.47	7.63	2.62	C	2.43	22.91
236.1	8457	0.141	1.23E-04	0.118	0.754	86.47	6.20	2.62	C	2.35	18.95
283.8	8449	0.199	1.76E-04	0.117	0.753	86.47	4.56	2.62	C	2.39	15.32
329.7	8440	0.291	2.49E-04	0.117	0.753	86.47	3.21	2.62	C	2.34	12.28
349.7	8435	0.351	2.92E-04	0.117	0.753	86.47	2.70	2.62	C	2.29	11.34
358.0	8422	0.419	3.37E-04	0.116	0.753	86.47	2.28	2.62	C	2.18	10.73
371.8	8395	0.588	4.41E-04	0.115	0.752	86.47	1.64	2.62	C	1.98	10.65
125.3	8498	0.020	5.13E-05	0.119	0.755	86.47	25.00	2.61	C	2.13	39.72
103.9	8495	0.039	3.87E-05	0.119	0.754	86.47	16.90	2.61	C	1.74	36.89
105.0	8493	0.047	3.82E-05	0.119	0.754	86.47	14.79	2.61	C	1.71	31.37
115.0	8492	0.056	4.17E-05	0.119	0.754	86.47	13.12	2.61	C	1.78	27.51
158.4	8489	0.078	6.04E-05	0.119	0.754	86.47	10.21	2.62	C	2.13	25.89
219.6	8486	0.110	9.36E-05	0.118	0.754	86.47	7.68	2.62	C	2.47	23.03
237.9	8469	0.140	1.22E-04	0.118	0.754	86.47	6.24	2.62	C	2.37	19.00
285.0	8461	0.198	1.75E-04	0.117	0.753	86.47	4.59	2.62	C	2.41	15.34
330.0	8451	0.289	2.47E-04	0.117	0.753	86.47	3.24	2.62	C	2.35	12.25
349.6	8446	0.348	2.90E-04	0.117	0.753	86.47	2.72	2.62	C	2.30	11.29
357.7	8434	0.416	3.35E-04	0.116	0.753	86.47	2.29	2.62	C	2.19	10.65
370.9	8407	0.584	4.38E-04	0.115	0.752	86.47	1.66	2.62	C	1.98	10.48
126.4	8508	0.020	5.09E-05	0.119	0.755	86.47	24.91	2.61	C	2.15	39.84
103.9	8505	0.039	3.85E-05	0.119	0.754	86.47	16.88	2.61	C	1.74	36.86
104.6	8503	0.047	3.82E-05	0.119	0.754	86.47	14.78	2.62	C	1.70	31.26
114.1	8501	0.056	4.17E-05	0.119	0.754	86.47	13.10	2.62	C	1.76	27.20
156.5	8498	0.078	6.03E-05	0.118	0.754	86.47	10.20	2.62	C	2.10	25.42
217.0	8496	0.110	9.33E-05	0.118	0.754	86.47	7.68	2.62	C	2.44	22.60
235.0	8478	0.140	1.22E-04	0.118	0.754	86.47	6.24	2.62	C	2.35	18.68
283.0	8470	0.198	1.74E-04	0.117	0.753	86.47	4.59	2.62	C	2.39	15.17
329.7	8460	0.288	2.46E-04	0.117	0.753	86.47	3.24	2.62	C	2.35	12.20
350.2	8456	0.347	2.88E-04	0.117	0.753	86.47	2.73	2.62	C	2.31	11.28
358.9	8443	0.414	3.33E-04	0.116	0.753	86.47	2.30	2.62	C	2.20	10.64
373.4	8416	0.582	4.35E-04	0.115	0.752	86.47	1.66	2.62	C	2.00	10.44

APPENDIX A2

Convective Boiling of R32 within a micro-fin tube

(file: taepure.tbl)

Nu	Re	x_f	Bo	P/P_c	T/T_c	M_w	Sv	Pr	flow	E_b	$U_{w,b}$	249.2	13942	0.132	1.27E-04	0.164	0.791	52.02	6.35	1.79	C	1.96	16.26
146.3	14121	0.009	4.01E-05	0.165	0.792	52.02	29.05	1.79	C	2.26	50.31	289.0	13934	0.199	1.85E-04	0.163	0.791	52.02	4.45	1.79	C	1.85	12.55
106.1	14118	0.023	2.68E-05	0.165	0.792	52.02	20.57	1.79	C	1.74	47.84	306.2	13929	0.243	2.19E-04	0.163	0.791	52.02	3.72	1.79	C	1.79	11.49
99.4	14116	0.029	2.51E-05	0.165	0.792	52.02	18.42	1.79	C	1.62	41.89	316.1	13916	0.295	2.55E-04	0.163	0.791	52.02	3.12	1.79	C	1.69	11.04
102.9	14114	0.034	2.65E-05	0.165	0.792	52.02	16.71	1.79	C	1.61	35.50	332.7	13889	0.424	3.38E-04	0.162	0.790	52.02	2.23	1.80	C	1.52	11.05
135.5	14111	0.048	3.90E-05	0.164	0.792	52.02	13.57	1.79	C	1.83	31.28	83.2	13970	0.003	4.80E-05	0.165	0.792	52.02	34.68	1.79	C	1.23	65.23
185.7	14108	0.070	6.37E-05	0.164	0.792	52.02	10.51	1.79	C	2.04	25.76	138.7	13966	0.026	5.90E-05	0.165	0.792	52.02	19.26	1.79	C	1.72	26.83
206.7	14090	0.090	8.55E-05	0.164	0.791	52.02	8.64	1.79	C	1.97	20.99	172.7	13964	0.040	6.75E-05	0.165	0.792	52.02	15.20	1.79	C	1.96	27.00
248.4	14082	0.131	1.26E-04	0.164	0.791	52.02	6.38	1.79	C	1.94	16.19	201.6	13961	0.056	7.79E-05	0.165	0.792	52.02	12.26	1.79	C	2.10	25.76
287.7	14073	0.198	1.83E-04	0.163	0.791	52.02	4.48	1.79	C	1.84	12.51	226.9	13955	0.095	1.05E-04	0.165	0.792	52.02	8.26	1.79	C	1.99	20.77
304.6	14068	0.242	2.17E-04	0.163	0.791	52.02	3.74	1.79	C	1.77	11.47	215.5	13950	0.147	1.39E-04	0.165	0.792	52.02	5.80	1.79	C	1.61	26.58
314.4	14055	0.293	2.53E-04	0.163	0.791	52.02	3.14	1.79	C	1.68	11.02	227.4	13910	0.180	9.16E-05	0.163	0.791	52.02	4.87	1.79	C	2.02	36.16
330.8	14027	0.421	3.35E-04	0.162	0.790	52.02	2.24	1.80	C	1.51	11.08	248.0	13897	0.220	1.18E-04	0.163	0.791	52.02	4.07	1.79	C	1.97	20.67
144.3	14118	0.009	3.97E-05	0.164	0.792	52.02	28.91	1.79	C	2.24	49.36	290.9	13882	0.283	1.76E-04	0.163	0.791	52.02	3.24	1.79	C	1.90	16.58
104.8	14115	0.023	2.67E-05	0.164	0.792	52.02	20.55	1.79	C	1.72	46.85	314.5	13875	0.326	2.17E-04	0.162	0.791	52.02	2.84	1.79	C	1.84	14.10
98.2	14113	0.029	2.50E-05	0.164	0.792	52.02	18.41	1.79	C	1.60	41.01	331.2	13858	0.379	2.65E-04	0.162	0.790	52.02	2.48	1.80	C	1.74	11.81
101.8	14111	0.034	2.65E-05	0.164	0.792	52.02	16.70	1.79	C	1.59	34.86	361.8	13824	0.519	3.83E-04	0.161	0.790	52.02	1.84	1.80	C	1.54	12.82
134.0	14108	0.048	3.90E-05	0.164	0.791	52.02	13.57	1.79	C	1.81	30.60	84.0	13935	0.004	4.83E-05	0.165	0.792	52.02	33.87	1.79	C	1.24	66.25
183.7	14105	0.070	6.34E-05	0.164	0.791	52.02	10.52	1.79	C	2.02	25.42	141.3	13932	0.027	5.92E-05	0.165	0.792	52.02	18.97	1.79	C	1.75	27.35
204.6	14087	0.090	8.51E-05	0.163	0.791	52.02	8.65	1.79	C	1.96	20.85	176.5	13930	0.041	6.77E-05	0.165	0.792	52.02	15.00	1.79	C	2.00	27.62
246.3	14079	0.131	1.25E-04	0.163	0.791	52.02	6.39	1.79	C	1.94	16.12	206.2	13927	0.057	7.81E-05	0.165	0.792	52.02	12.13	1.79	C	2.14	26.44
285.8	14070	0.197	1.82E-04	0.163	0.791	52.02	4.49	1.79	C	1.84	12.47	230.9	13922	0.096	1.05E-04	0.164	0.792	52.02	8.20	1.79	C	2.02	21.37
302.9	14065	0.241	2.15E-04	0.162	0.791	52.02	3.76	1.79	C	1.77	11.46	217.5	13916	0.148	1.38E-04	0.164	0.792	52.02	5.77	1.79	C	1.63	27.22
312.7	14052	0.291	2.51E-04	0.162	0.790	52.02	3.16	1.79	C	1.68	10.98	233.1	13878	0.181	9.16E-05	0.163	0.791	52.02	4.85	1.79	C	2.08	37.62
329.2	14023	0.418	3.32E-04	0.161	0.790	52.02	2.26	1.80	C	1.51	11.01	252.1	13865	0.221	1.18E-04	0.163	0.791	52.02	4.06	1.79	C	2.00	21.01
146.5	13923	0.009	4.06E-05	0.165	0.792	52.02	29.14	1.79	C	2.28	49.98	294.2	13850	0.284	1.76E-04	0.162	0.791	52.02	3.23	1.79	C	1.93	16.79
105.8	13919	0.023	2.72E-05	0.165	0.792	52.02	20.54	1.79	C	1.75	47.53	317.6	13842	0.327	2.17E-04	0.162	0.790	52.02	2.84	1.80	C	1.86	14.25
98.9	13917	0.029	2.54E-05	0.165	0.792	52.02	18.37	1.79	C	1.62	41.65	334.2	13826	0.380	2.65E-04	0.161	0.790	52.02	2.47	1.80	C	1.76	11.92
102.3	13916	0.034	2.69E-05	0.165	0.792	52.02	16.65	1.79	C	1.61	35.11	365.0	13792	0.520	3.84E-04	0.160	0.789	52.02	1.83	1.80	C	1.56	12.97
134.8	13912	0.049	3.96E-05	0.165	0.792	52.02	13.49	1.79	C	1.83	30.96	84.1	13932	0.004	4.81E-05	0.165	0.792	52.02	33.77	1.79	C	1.24	66.35
184.9	13909	0.070	6.47E-05	0.165	0.792	52.02	10.43	1.79	C	2.04	25.52	140.1	13928	0.027	5.92E-05	0.164	0.792	52.02	18.94	1.79	C	1.74	27.17
206.2	13892	0.091	8.69E-05	0.164	0.792	52.02	8.56	1.79	C	1.97	20.92	174.0	13926	0.041	6.77E-05	0.164	0.792	52.02	14.99	1.79	C	1.97	27.40
248.0	13884	0.133	1.28E-04	0.164	0.791	52.02	6.31	1.79	C	1.94	16.15	202.6	13923	0.057	7.79E-05	0.164	0.792	52.02	12.12	1.79	C	2.11	26.21
287.7	13875	0.201	1.86E-04	0.164	0.791	52.02	4.42	1.79	C	1.84	12.49	227.4	13917	0.096	1.04E-04	0.164	0.792	52.02	8.20	1.79	C	2.00	21.22
304.8	13870	0.245	2.20E-04	0.163	0.791	52.02	3.69	1.79	C	1.78	11.45	215.8	13912	0.148	1.37E-04	0.164	0.792	52.02	5.78	1.79	C	1.62	27.23
314.8	13857	0.297	2.57E-04	0.163	0.791	52.02	3.10	1.79	C	1.68	11.01	229.8	13872	0.180	9.18E-05	0.163	0.791	52.02	4.86	1.79	C	2.05	37.37
331.6	13830	0.427	3.40E-04	0.162	0.790	52.02	2.21	1.79	C	1.51	11.04	248.7	13858	0.221	1.18E-04	0.162	0.791	52.02	4.06	1.79	C	1.98	21.04
148.1	13917	0.009	4.08E-05	0.165	0.792	52.02	29.12	1.79	C	2.30	50.09	290.0	13842	0.284	1.76E-04	0.162	0.790	52.02	3.24	1.80	C	1.90	16.81
106.5	13914	0.023	2.73E-05	0.165	0.792	52.02	20.51	1.79	C	1.76	47.44	312.7	13834	0.327	2.17E-04	0.161	0.790	52.02	2.84	1.80	C	1.84	14.23
99.3	13912	0.029	2.54E-05	0.165	0.792	52.02	18.34	1.79	C	1.63	41.86	328.8	13818	0.379	2.65E-04	0.161	0.790	52.02	2.48	1.80	C	1.74	11.88
102.5	13911	0.034	2.69E-05	0.165	0.792	52.02	16.62	1.79	C	1.62	35.37	358.2	13783	0.519	3.83E-04	0.160	0.789	52.02	1.84	1.80	C	1.53	12.96
134.9	13907	0.049	3.96E-05	0.165	0.792	52.02	13.48	1.79	C	1.83	30.99	83.0	13960	0.004	4.80E-05	0.164	0.792	52.02	33.44	1.79	C	1.23	66.46
185.4	13904	0.070	6.46E-05	0.165	0.792	52.02	10.43	1.79	C	2.04	25.68	138.4	13956	0.027	5.90E-05	0.164	0.792	52.02	18.86	1.79	C	1.71	26.86
207.7	13888	0.091	8.69E-05	0.164	0.792	52.02	8.56	1.79	C	1.99	21.03	172.1	13954	0.041	6.75E-05	0.164	0.792	52.02	14.95	1.79	C	1.95	26.94
250.1	13880	0.133	1.28E-04	0.164	0.792	52.02	6.31	1.79	C	1.96	16.29	200.5	13951	0.057	7.77E-05	0.164	0.792	52.02	12.10	1.79	C	2.08	25.67
290.3	13871	0.201	1.86E-04	0.164	0.791	52.02	4.42	1.79	C	1.86	12.58	225.0	13945	0.097	1.04E-04	0.164	0.791	52.02	8.20	1.79	C	1.98	20.72
307.8	13867	0.245	2.20E-04	0.164	0.791	52.02	3.69	1.79	C	1.79	11.55	213.4	13939	0.148	1.37E-04	0.164	0.791	52.02	5.78	1.79	C	1.61	26.88
318.0	13854	0.297	2.57E-04	0.163	0.791	52.02	3.10	1.79	C	1.70	11.09	223.9	13899	0.180	9.06E-05	0.162	0.791	52.02	4.87	1.79	C	2.00	36.97
335.3	13826	0.427	3.41E-04	0.162	0.791	52.02	2.21	1.79	C	1.53	11.12	246.2	13885	0.220	1.18E-04	0.162	0.790	52.02	4.07	1.80	C	1.96	20.51
145.3	13922	0.009	4.08E-05	0.165	0.792	52.02	28.90	1.79	C	2.25	49.57	289.3	13870	0.283	1.76E-04	0.161	0.790	52.02	3.24	1.80	C	1.89	16.46
105.0	13919	0.023	2.72E-05	0.165	0.792	52.02	20.40	1.79	C	1.73	47.08	312.6	13863	0.326	2.17E-04	0.161	0.790	52.02	2.85	1.80	C	1.84	13.99
98.2	13917	0.029	2.53E-05	0.165	0.792	52.02	18.26	1.79	C	1.61	41.35	328.9	13846	0.378	2.64E-04	0.161	0.790	52.02	2.48	1.80			

208.4	13983	0.053	7.71E-05	0.165	0.792	52.02	12.69	1.79	C	2.18	26.21	350.9	13858	0.507	3.72E-04	0.161	0.790	52.02	1.88	1.80	C	1.52	14.83
236.3	13977	0.092	1.03E-04	0.165	0.792	52.02	8.49	1.79	C	2.09	21.49	81.8	13991	0.001	4.63E-05	0.166	0.792	52.02	37.44	1.79	C	1.25	64.24
225.0	13972	0.144	1.35E-04	0.165	0.792	52.02	5.94	1.79	C	1.70	26.29	139.9	13987	0.023	5.80E-05	0.165	0.792	52.02	20.31	1.79	C	1.76	26.03
216.8	13935	0.173	8.40E-05	0.164	0.791	52.02	5.02	1.79	C	2.00	43.51	175.8	13985	0.037	6.66E-05	0.165	0.792	52.02	15.89	1.79	C	2.02	26.28
271.1	13921	0.213	1.17E-04	0.163	0.791	52.02	4.20	1.79	C	2.16	24.76	206.6	13982	0.053	7.69E-05	0.165	0.792	52.02	12.74	1.79	C	2.17	25.33
321.6	13906	0.276	1.78E-04	0.163	0.791	52.02	3.32	1.79	C	2.09	19.84	234.4	13976	0.092	1.03E-04	0.165	0.792	52.02	8.52	1.79	C	2.07	20.78
339.4	13898	0.319	2.18E-04	0.163	0.791	52.02	2.90	1.79	C	1.98	16.50	222.5	13970	0.142	1.35E-04	0.165	0.792	52.02	5.96	1.79	C	1.69	25.62
346.3	13882	0.372	2.64E-04	0.162	0.790	52.02	2.52	1.79	C	1.82	13.41	212.7	13933	0.173	8.36E-05	0.164	0.791	52.02	5.04	1.79	C	1.96	43.22
353.1	13848	0.510	3.75E-04	0.161	0.790	52.02	1.87	1.80	C	1.52	14.48	264.6	13919	0.212	1.17E-04	0.163	0.791	52.02	4.22	1.79	C	2.11	24.22
84.2	14060	0.001	4.62E-05	0.166	0.793	52.02	37.78	1.79	C	1.28	64.20	314.5	13904	0.275	1.77E-04	0.163	0.791	52.02	3.33	1.79	C	2.05	19.41
141.1	14056	0.023	5.77E-05	0.166	0.793	52.02	20.44	1.79	C	1.77	26.52	332.8	13896	0.318	2.17E-04	0.163	0.791	52.02	2.91	1.79	C	1.95	16.18
175.7	14054	0.037	6.63E-05	0.166	0.793	52.02	15.99	1.79	C	2.01	26.71	340.7	13880	0.370	2.63E-04	0.162	0.790	52.02	2.53	1.79	C	1.80	13.23
205.8	14051	0.052	7.65E-05	0.166	0.792	52.02	12.82	1.79	C	2.16	25.70	349.6	13846	0.508	3.73E-04	0.161	0.790	52.02	1.88	1.80	C	1.51	14.39
234.9	14045	0.091	1.02E-04	0.165	0.792	52.02	8.57	1.79	C	2.08	21.18	82.5	14033	0.001	4.63E-05	0.165	0.792	52.02	37.05	1.79	C	1.25	64.13
226.2	14040	0.141	1.35E-04	0.165	0.792	52.02	6.00	1.79	C	1.71	26.27	140.5	14029	0.024	5.80E-05	0.165	0.792	52.02	20.19	1.79	C	1.76	26.13
211.4	14002	0.172	8.32E-05	0.164	0.792	52.02	5.06	1.79	C	1.95	42.91	176.1	14027	0.037	6.66E-05	0.165	0.792	52.02	15.82	1.79	C	2.01	26.34
265.0	13988	0.211	1.16E-04	0.164	0.791	52.02	4.24	1.79	C	2.11	24.12	206.6	14024	0.053	7.69E-05	0.165	0.792	52.02	12.70	1.79	C	2.16	25.45
316.6	13974	0.273	1.76E-04	0.163	0.791	52.02	3.35	1.79	C	2.06	19.48	234.1	14018	0.092	1.03E-04	0.165	0.792	52.02	8.50	1.79	C	2.07	20.90
335.3	13966	0.316	2.16E-04	0.163	0.791	52.02	2.93	1.79	C	1.96	16.23	222.4	14012	0.142	1.35E-04	0.165	0.792	52.02	5.96	1.79	C	1.69	25.81
343.0	13950	0.368	2.62E-04	0.162	0.791	52.02	2.54	1.79	C	1.81	13.26	212.7	13973	0.173	8.35E-05	0.164	0.791	52.02	5.03	1.79	C	1.96	43.21
351.4	13916	0.506	3.72E-04	0.161	0.790	52.02	1.88	1.80	C	1.52	14.37	266.0	13960	0.212	1.17E-04	0.163	0.791	52.02	4.21	1.79	C	2.12	24.14
83.8	13892	0.000	4.71E-05	0.166	0.793	52.02	38.66	1.79	C	2.47	64.90	317.1	13945	0.275	1.77E-04	0.163	0.791	52.02	3.33	1.79	C	2.06	19.41
142.4	13890	0.023	5.90E-05	0.166	0.793	52.02	20.49	1.79	C	1.79	26.51	335.7	13937	0.318	2.17E-04	0.162	0.791	52.02	2.91	1.79	C	1.96	16.23
177.8	13888	0.037	6.78E-05	0.166	0.793	52.02	15.94	1.79	C	2.03	26.63	343.4	13921	0.370	2.63E-04	0.162	0.790	52.02	2.53	1.80	C	1.81	13.21
208.0	13885	0.053	7.82E-05	0.166	0.793	52.02	12.73	1.79	C	2.17	25.59	351.8	13887	0.508	3.73E-04	0.161	0.790	52.02	1.88	1.80	C	1.52	14.39
235.3	13879	0.092	1.05E-04	0.166	0.793	52.02	8.47	1.79	C	2.07	21.00	83.6	14021	0.001	4.62E-05	0.166	0.793	52.02	37.63	1.79	C	1.28	63.83
224.2	13873	0.143	1.37E-04	0.166	0.793	52.02	5.91	1.79	C	1.69	26.07	142.4	14018	0.023	5.79E-05	0.166	0.793	52.02	20.38	1.79	C	1.79	26.31
211.8	13836	0.175	8.39E-05	0.165	0.792	52.02	4.99	1.79	C	1.96	44.55	178.6	14016	0.037	6.65E-05	0.166	0.792	52.02	15.94	1.79	C	2.05	26.60
267.8	13822	0.214	1.19E-04	0.164	0.792	52.02	4.17	1.79	C	2.13	24.53	209.9	14013	0.052	7.68E-05	0.166	0.792	52.02	12.78	1.79	C	2.20	25.75
318.8	13807	0.278	1.80E-04	0.164	0.791	52.02	3.29	1.79	C	2.07	19.62	238.8	14007	0.091	1.03E-04	0.165	0.792	52.02	8.54	1.79	C	2.11	21.20
336.6	13799	0.322	2.21E-04	0.163	0.791	52.02	2.88	1.79	C	1.96	16.34	227.7	14002	0.142	1.35E-04	0.165	0.792	52.02	5.98	1.79	C	1.73	25.94
343.6	13784	0.375	2.66E-04	0.163	0.791	52.02	2.50	1.79	C	1.81	13.34	215.2	13964	0.173	8.34E-05	0.164	0.792	52.02	5.04	1.79	C	1.98	43.27
350.5	13751	0.515	3.77E-04	0.162	0.790	52.02	1.85	1.80	C	1.51	14.60	269.8	13951	0.211	1.17E-04	0.164	0.791	52.02	4.22	1.79	C	2.15	24.32
80.6	13974	-0.001	4.69E-05	0.167	0.793	52.02	39.34	1.79	C	2.36	63.80	321.4	13936	0.275	1.77E-04	0.163	0.791	52.02	3.34	1.79	C	2.09	19.49
142.0	13986	0.022	5.85E-05	0.167	0.793	52.02	20.74	1.79	C	1.78	26.32	339.9	13929	0.318	2.17E-04	0.163	0.791	52.02	2.91	1.79	C	1.98	16.28
177.6	13984	0.036	6.72E-05	0.167	0.793	52.02	16.13	1.79	C	2.03	26.43	347.1	13913	0.370	2.63E-04	0.162	0.791	52.02	2.53	1.79	C	1.83	13.28
208.2	13982	0.052	7.76E-05	0.167	0.793	52.02	12.87	1.79	C	2.18	25.48	354.8	13879	0.508	3.74E-04	0.161	0.790	52.02	1.88	1.80	C	1.53	14.35
236.1	13976	0.091	1.04E-04	0.166	0.793	52.02	8.55	1.79	C	2.08	20.90	91.2	13955	0.003	4.80E-05	0.166	0.792	52.02	34.20	1.79	C	1.35	61.16
224.9	13970	0.142	1.37E-04	0.166	0.793	52.02	5.96	1.79	C	1.70	25.78	154.0	13951	0.027	5.92E-05	0.165	0.792	52.02	19.09	1.79	C	1.91	27.37
213.9	13934	0.173	8.32E-05	0.165	0.792	52.02	5.03	1.79	C	1.98	45.14	192.3	13949	0.041	6.78E-05	0.165	0.792	52.02	15.07	1.79	C	2.18	28.16
271.0	13920	0.212	1.17E-04	0.165	0.792	52.02	4.21	1.79	C	2.15	25.01	224.7	13946	0.056	7.82E-05	0.165	0.792	52.02	12.17	1.79	C	2.33	27.28
322.1	13906	0.276	1.79E-04	0.164	0.792	52.02	3.32	1.79	C	2.09	19.94	251.5	13940	0.096	1.05E-04	0.165	0.792	52.02	8.21	1.79	C	2.20	22.21
339.4	13898	0.319	2.19E-04	0.164	0.791	52.02	2.90	1.79	C	1.98	16.58	236.7	13935	0.148	1.38E-04	0.165	0.792	52.02	5.77	1.79	C	1.77	26.32
345.6	13883	0.372	2.64E-04	0.163	0.791	52.02	2.52	1.79	C	1.81	13.48	252.0	13896	0.180	8.99E-05	0.164	0.791	52.02	4.86	1.79	C	2.26	43.63
351.0	13849	0.510	3.74E-04	0.162	0.791	52.02	1.87	1.79	C	1.51	14.71	284.5	13882	0.221	1.19E-04	0.163	0.791	52.02	4.07	1.79	C	2.25	25.37
80.7	13951	-0.001	4.69E-05	0.167	0.793	52.02	39.41	1.79	C	2.37	63.74	320.8	13868	0.284	1.78E-04	0.163	0.791	52.02	3.23	1.79	C	2.09	19.75
141.0	13964	0.022	5.86E-05	0.167	0.793	52.02	20.75	1.79	C	1.77	26.46	335.6	13860	0.328	2.18E-04	0.162	0.791	52.02	2.83	1.79	C	1.97	16.35
175.4	13962	0.036	6.73E-05	0.167	0.793	52.02	16.13	1.79	C	2.01	26.53	341.5	13844	0.380	2.64E-04	0.162	0.790	52.02	2.47	1.80	C	1.80	13.24
205.1	13959	0.052	7.77E-05	0.167	0.793	52.02	12.86	1.79	C	2.15	25.50	350.4	13810	0.518	3.77E-04	0.161	0.790	52.02	1.84	1.80	C	1.51	14.18
233.8	13953	0.091	1.04E-04	0.166	0.793	52.02	8.54	1.79	C	2.06	21.04	92.5	13940	0.009	6.38E-05	0.166	0.793	52.02	29.08	1.79	C	1.17	62.93
225.2	13947	0.142	1.37E-04	0.166	0.793	52.02	5.95	1.79	C	1.70	26.09	172.6	13936	0.040	8.40E-05	0.166	0.792	52.02	15.09	1.79	C	1.77	25.39
210.7	13909	0.174	8.41E-05	0.165	0.792	52.02	5.01	1.79	C	1.94	43.30	224.3	13933	0.061	9.84E-05	0.166	0.792	52.02	11.59	1.79	C	2.09	25.97
265.2	13896	0.213	1.18E-04	0.165	0.792	52.02	4.20	1.79	C	2.11													

286.3	13895	0.293	1.03E-04	0.163	0.791	52.02	3.14	1.79	C	2.39	27.72	222.3	14106	0.054	7.65E-05	0.165	0.792	52.02	12.48	1.79	C	2.32	26.94
323.4	13875	0.349	1.56E-04	0.162	0.790	52.02	2.67	1.80	C	2.25	21.06	251.3	14100	0.093	1.03E-04	0.165	0.792	52.02	8.41	1.79	C	2.21	22.06
332.4	13865	0.387	1.88E-04	0.162	0.790	52.02	2.43	1.80	C	2.11	17.38	238.3	14094	0.144	1.36E-04	0.165	0.792	52.02	5.91	1.79	C	1.79	26.15
331.5	13848	0.431	2.24E-04	0.161	0.790	52.02	2.19	1.80	C	1.92	14.06	248.2	14055	0.176	8.73E-05	0.163	0.791	52.02	4.98	1.79	C	2.24	43.39
325.8	13812	0.547	3.07E-04	0.160	0.789	52.02	1.75	1.80	C	1.59	15.27	281.9	14041	0.215	1.17E-04	0.163	0.791	52.02	4.16	1.79	C	2.23	24.90
92.7	14021	0.008	6.37E-05	0.166	0.793	52.02	29.69	1.79	C	1.17	64.55	317.5	14025	0.278	1.75E-04	0.162	0.791	52.02	3.30	1.79	C	2.07	19.23
174.5	14017	0.040	8.37E-05	0.166	0.792	52.02	15.27	1.79	C	1.79	25.61	331.7	14017	0.321	2.14E-04	0.162	0.791	52.02	2.89	1.79	C	1.94	15.94
227.5	14014	0.060	9.81E-05	0.166	0.792	52.02	11.71	1.79	C	2.11	26.17	337.1	14000	0.372	2.59E-04	0.162	0.790	52.02	2.52	1.80	C	1.78	12.94
272.1	14010	0.083	1.15E-04	0.165	0.792	52.02	9.22	1.79	C	2.29	25.61	344.9	13965	0.508	3.68E-04	0.160	0.790	52.02	1.88	1.80	C	1.50	13.88
305.0	14002	0.142	1.57E-04	0.165	0.792	52.02	5.97	1.79	C	2.14	20.33	89.5	13953	0.003	4.80E-05	0.165	0.792	52.02	34.39	1.79	C	1.33	62.44
279.8	13993	0.219	2.09E-04	0.165	0.792	52.02	4.08	1.79	C	1.67	24.17	152.8	13949	0.027	5.90E-05	0.165	0.792	52.02	19.16	1.79	C	1.90	27.27
231.4	13931	0.260	6.93E-05	0.163	0.791	52.02	3.51	1.79	C	2.23	55.69	192.2	13947	0.041	6.75E-05	0.164	0.792	52.02	15.13	1.79	C	2.18	28.01
289.8	13913	0.293	1.03E-04	0.162	0.791	52.02	3.14	1.79	C	2.41	27.80	225.8	13944	0.056	7.76E-05	0.164	0.792	52.02	12.22	1.79	C	2.35	27.29
326.4	13893	0.349	1.56E-04	0.162	0.790	52.02	2.67	1.80	C	2.27	21.19	253.6	13938	0.096	1.04E-04	0.164	0.792	52.02	8.26	1.79	C	2.23	22.30
335.2	13883	0.387	1.88E-04	0.161	0.790	52.02	2.43	1.80	C	2.13	17.41	237.4	13932	0.146	1.37E-04	0.164	0.792	52.02	5.82	1.79	C	1.79	26.69
334.0	13866	0.432	2.24E-04	0.161	0.790	52.02	2.19	1.80	C	1.94	14.13	253.0	13893	0.179	8.89E-05	0.163	0.791	52.02	4.90	1.79	C	2.28	43.96
328.0	13830	0.547	3.07E-04	0.160	0.789	52.02	1.75	1.80	C	1.60	15.21	285.8	13880	0.219	1.19E-04	0.162	0.791	52.02	4.10	1.79	C	2.26	25.25
93.4	14006	0.008	6.37E-05	0.166	0.793	52.02	29.92	1.79	C	1.18	64.33	320.8	13864	0.282	1.77E-04	0.162	0.790	52.02	3.25	1.80	C	2.09	19.53
174.8	14002	0.039	8.39E-05	0.166	0.793	52.02	15.33	1.79	C	1.80	25.68	334.7	13857	0.325	2.17E-04	0.162	0.790	52.02	2.85	1.80	C	1.97	16.17
227.4	13999	0.059	9.84E-05	0.166	0.793	52.02	11.73	1.79	C	2.11	26.19	339.8	13840	0.377	2.62E-04	0.161	0.790	52.02	2.49	1.80	C	1.80	13.10
271.6	13995	0.083	1.15E-04	0.166	0.793	52.02	9.23	1.79	C	2.29	25.77	347.3	13805	0.515	3.73E-04	0.160	0.789	52.02	1.85	1.80	C	1.51	13.96
305.4	13987	0.142	1.58E-04	0.165	0.792	52.02	5.97	1.79	C	2.14	20.38	90.0	13900	0.004	4.80E-05	0.164	0.792	52.02	34.33	1.79	C	1.34	63.15
282.0	13978	0.220	2.11E-04	0.165	0.792	52.02	4.07	1.79	C	1.67	24.20	154.0	13896	0.027	5.92E-05	0.164	0.792	52.02	19.12	1.79	C	1.91	27.57
228.3	13916	0.260	6.92E-05	0.163	0.791	52.02	3.50	1.79	C	2.20	55.32	193.7	13894	0.041	6.76E-05	0.164	0.792	52.02	15.10	1.79	C	2.20	28.37
287.7	13898	0.294	1.03E-04	0.163	0.791	52.02	3.13	1.79	C	2.40	27.60	227.2	13891	0.056	7.78E-05	0.164	0.792	52.02	12.20	1.79	C	2.37	27.70
325.3	13878	0.350	1.56E-04	0.162	0.790	52.02	2.66	1.79	C	2.26	21.07	254.0	13885	0.096	1.04E-04	0.164	0.792	52.02	8.25	1.79	C	2.24	22.51
334.6	13868	0.388	1.88E-04	0.162	0.790	52.02	2.42	1.80	C	2.12	17.39	236.8	13879	0.147	1.36E-04	0.164	0.791	52.02	5.81	1.79	C	1.79	26.97
333.8	13851	0.433	2.24E-04	0.161	0.790	52.02	2.18	1.80	C	1.94	14.12	251.9	13840	0.179	8.94E-05	0.162	0.791	52.02	4.90	1.79	C	2.27	43.76
328.1	13816	0.549	3.08E-04	0.160	0.789	52.02	1.74	1.80	C	1.60	15.18	285.4	13826	0.219	1.19E-04	0.162	0.790	52.02	4.09	1.79	C	2.26	25.32
92.5	13997	0.008	6.37E-05	0.166	0.793	52.02	29.78	1.79	C	1.17	64.69	320.9	13811	0.283	1.78E-04	0.161	0.790	52.02	3.25	1.80	C	2.10	19.60
173.9	13992	0.040	8.39E-05	0.166	0.792	52.02	15.29	1.79	C	1.79	25.55	335.0	13803	0.326	2.17E-04	0.161	0.790	52.02	2.85	1.80	C	1.97	16.22
226.7	13990	0.060	9.83E-05	0.166	0.792	52.02	11.71	1.79	C	2.11	26.08	340.4	13787	0.378	2.63E-04	0.161	0.790	52.02	2.48	1.80	C	1.80	13.14
271.4	13986	0.083	1.15E-04	0.165	0.792	52.02	9.22	1.79	C	2.29	25.63	948.1	13753	0.517	3.75E-04	0.160	0.789	52.02	1.85	1.80	C	1.51	14.05
305.7	13977	0.142	1.58E-04	0.165	0.792	52.02	5.97	1.79	C	2.15	20.35	90.9	13894	0.004	4.80E-05	0.164	0.792	52.02	34.10	1.79	C	1.35	63.33
281.7	13969	0.220	2.10E-04	0.165	0.792	52.02	4.08	1.79	C	1.68	24.25	153.2	13890	0.027	5.92E-05	0.164	0.792	52.02	19.06	1.79	C	1.90	27.52
228.8	13908	0.260	6.92E-05	0.163	0.791	52.02	3.51	1.79	C	2.21	55.86	191.3	13888	0.041	6.77E-05	0.164	0.792	52.02	15.06	1.79	C	2.17	28.16
287.6	13890	0.294	1.04E-04	0.162	0.791	52.02	3.14	1.79	C	2.40	27.57	223.5	13885	0.057	7.79E-05	0.164	0.792	52.02	12.17	1.79	C	2.33	27.32
324.8	13870	0.350	1.56E-04	0.162	0.790	52.02	2.67	1.80	C	2.26	20.93	250.9	13879	0.096	1.04E-04	0.164	0.791	52.02	8.23	1.79	C	2.21	22.35
334.0	13860	0.388	1.89E-04	0.161	0.790	52.02	2.42	1.80	C	2.12	17.28	236.6	13874	0.147	1.37E-04	0.164	0.791	52.02	5.80	1.79	C	1.79	26.97
333.2	13843	0.433	2.25E-04	0.161	0.790	52.02	2.19	1.80	C	1.93	14.03	248.3	13835	0.179	8.88E-05	0.162	0.791	52.02	4.89	1.79	C	2.24	43.46
327.7	13807	0.548	3.08E-04	0.160	0.789	52.02	1.74	1.80	C	1.60	15.14	282.4	13821	0.220	1.19E-04	0.162	0.790	52.02	4.09	1.80	C	2.24	24.79
93.2	13996	0.008	6.38E-05	0.166	0.792	52.02	29.59	1.79	C	1.18	65.25	318.2	13805	0.323	1.78E-04	0.161	0.790	52.02	3.24	1.80	C	2.08	19.25
174.8	13992	0.040	8.40E-05	0.165	0.792	52.02	15.23	1.79	C	1.79	25.70	332.4	13797	0.327	2.18E-04	0.161	0.790	52.02	2.84	1.80	C	1.95	15.96
227.4	13989	0.060	9.84E-05	0.165	0.792	52.02	11.67	1.79	C	2.11	26.14	337.9	13781	0.379	2.63E-04	0.161	0.790	52.02	2.48	1.80	C	1.79	12.99
271.7	13985	0.083	1.15E-04	0.165	0.792	52.02	9.19	1.79	C	2.29	25.69	345.8	13746	0.517	3.74E-04	0.159	0.789	52.02	1.85	1.80	C	1.50	13.90
305.0	13976	0.142	1.58E-04	0.165	0.792	52.02	5.96	1.79	C	2.14	20.39	89.9	13915	0.003	4.81E-05	0.165	0.792	52.02	34.69	1.79	C	1.34	63.09
280.9	13968	0.220	2.10E-04	0.165	0.792	52.02	4.07	1.79	C	1.67	24.32	153.1	13911	0.026	5.95E-05	0.165	0.792	52.02	19.21	1.79	C	1.90	27.36
226.5	13904	0.260	6.94E-05	0.163	0.791	52.02	3.50	1.79	C	2.18	55.15	192.5	13909	0.040	6.82E-05	0.165	0.792	52.02	15.14	1.79	C	2.18	28.07
283.9	13886	0.294	1.03E-04	0.162	0.790	52.02	3.13	1.79	C	2.37	27.35	226.1	13906	0.056	7.86E-05	0.165	0.792	52.02	12.20	1.79	C	2.35	27.38
321.5	13866	0.350	1.56E-04	0.161	0.790	52.02	2.67	1.80	C	2.24	20.84	255.4	13900	0.096	1.05E-04	0.164	0.792	52.02	8.21	1.79	C	2.24	22.38
331.2	13856	0.388	1.89E-04	0.161	0.790	52.02	2.42	1.80	C	2.10	17.23	241.2	13894	0.148	1.39E-04	0.164	0.792	52.02	5.77	1.79	C	1.81	26.83
331.2	13839	0.433	2.24E-04	0.161	0.790	52.02	2.18	1.80	C	1.92	14.01	254.2	13854	0.181	9.02E-05	0.163	0.791	52.02	4.86	1.79	C	2.28	43.38
327.0	13803	0.549	3.08E-04	0.159	0.789	52.02	1.74	1.80	C	1.60	15.18</												

342.5	13712	0.602	2.66E-04	0.158	0.788	52.02	1.60	1.80	C	1.85	16.31	289.7	13779	0.388	8.81E-05	0.162	0.790	52.02	2.42	1.79	C	2.60	29.72
97.0	13843	0.017	8.08E-05	0.165	0.792	52.02	23.42	1.79	C	1.07	56.16	337.5	13754	0.436	1.36E-04	0.161	0.790	52.02	2.17	1.80	C	2.54	22.56
194.0	13838	0.058	1.09E-04	0.165	0.792	52.02	11.97	1.79	C	1.73	24.16	349.7	13742	0.470	1.65E-04	0.161	0.790	52.02	2.02	1.80	C	2.41	18.64
260.3	13836	0.084	1.31E-04	0.165	0.792	52.02	9.10	1.79	C	2.08	25.55	350.9	13724	0.509	1.96E-04	0.160	0.789	52.02	1.87	1.80	C	2.22	15.29
316.3	13830	0.115	1.56E-04	0.165	0.792	52.02	7.10	1.79	C	2.27	25.67	346.8	13687	0.610	2.69E-04	0.159	0.789	52.02	1.58	1.80	C	1.86	16.09
355.0	13818	0.196	2.19E-04	0.165	0.792	52.02	4.51	1.79	C	2.09	19.74	97.3	13917	0.016	8.10E-05	0.166	0.793	52.02	23.74	1.79	C	1.07	56.21
322.6	13807	0.306	2.99E-04	0.164	0.792	52.02	3.02	1.79	C	1.58	22.08	194.1	13912	0.057	1.10E-04	0.166	0.793	52.02	12.04	1.79	C	1.72	24.09
216.2	13721	0.357	5.52E-05	0.161	0.790	52.02	2.62	1.80	C	2.25	69.45	260.4	13910	0.084	1.31E-04	0.166	0.793	52.02	9.14	1.79	C	2.07	25.31
289.7	13699	0.385	8.80E-05	0.161	0.790	52.02	2.44	1.80	C	2.61	30.18	316.3	13904	0.115	1.56E-04	0.166	0.793	52.02	7.11	1.79	C	2.26	25.37
336.0	13675	0.434	1.36E-04	0.160	0.789	52.02	2.18	1.80	C	2.54	22.74	355.2	13892	0.196	2.21E-04	0.165	0.792	52.02	4.50	1.79	C	2.07	19.47
347.4	13663	0.467	1.65E-04	0.160	0.789	52.02	2.03	1.80	C	2.41	18.77	323.4	13880	0.307	3.01E-04	0.165	0.792	52.02	3.01	1.79	C	1.57	21.86
348.1	13645	0.506	1.96E-04	0.159	0.789	52.02	1.88	1.80	C	2.21	15.39	216.9	13796	0.359	5.50E-05	0.162	0.791	52.02	2.61	1.79	C	2.25	70.61
343.2	13609	0.607	2.68E-04	0.158	0.788	52.02	1.58	1.80	C	1.85	16.36	291.8	13773	0.387	8.81E-05	0.162	0.790	52.02	2.43	1.80	C	2.62	30.06
96.0	13907	0.016	8.03E-05	0.166	0.792	52.02	23.77	1.79	C	1.06	56.30	339.1	13748	0.435	1.36E-04	0.161	0.790	52.02	2.17	1.80	C	2.56	22.63
192.2	13902	0.057	1.09E-04	0.165	0.792	52.02	12.09	1.79	C	1.71	23.90	350.8	13735	0.468	1.65E-04	0.160	0.790	52.02	2.03	1.80	C	2.42	18.75
258.2	13900	0.083	1.30E-04	0.165	0.792	52.02	9.19	1.79	C	2.06	25.13	352.0	13718	0.508	1.96E-04	0.160	0.789	52.02	1.88	1.80	C	2.23	15.36
313.8	13894	0.114	1.55E-04	0.165	0.792	52.02	7.16	1.79	C	2.25	25.16	347.8	13682	0.609	2.68E-04	0.159	0.789	52.02	1.58	1.80	C	1.87	16.37
352.1	13882	0.195	2.19E-04	0.165	0.792	52.02	4.54	1.79	C	2.07	19.32	96.8	13933	0.015	8.06E-05	0.166	0.793	52.02	24.18	1.79	C	1.06	55.97
319.9	13870	0.304	2.97E-04	0.164	0.792	52.02	3.04	1.79	C	1.57	21.71	194.8	13929	0.056	1.09E-04	0.166	0.793	52.02	12.17	1.79	C	1.73	24.12
210.7	13785	0.355	5.46E-05	0.162	0.790	52.02	2.63	1.80	C	2.19	68.94	262.1	13927	0.083	1.31E-04	0.166	0.793	52.02	9.22	1.79	C	2.08	25.50
284.9	13763	0.383	8.72E-05	0.161	0.790	52.02	2.45	1.80	C	2.57	29.56	318.8	13921	0.114	1.56E-04	0.166	0.793	52.02	7.16	1.79	C	2.27	25.61
333.4	13738	0.431	1.35E-04	0.160	0.789	52.02	2.19	1.80	C	2.52	22.44	357.1	13909	0.195	2.21E-04	0.166	0.792	52.02	4.52	1.79	C	2.08	19.62
345.8	13725	0.464	1.63E-04	0.160	0.789	52.02	2.05	1.80	C	2.40	18.62	323.7	13897	0.305	3.01E-04	0.165	0.792	52.02	3.02	1.79	C	1.57	21.82
347.2	13707	0.503	1.94E-04	0.159	0.789	52.02	1.90	1.80	C	2.21	15.27	219.1	13812	0.357	5.55E-05	0.162	0.791	52.02	2.61	1.79	C	2.27	67.78
343.2	13670	0.603	2.65E-04	0.158	0.788	52.02	1.59	1.80	C	1.86	16.23	292.5	13790	0.385	8.77E-05	0.162	0.790	52.02	2.44	1.80	C	2.63	30.13
96.3	13990	0.015	7.99E-05	0.167	0.793	52.02	24.12	1.79	C	1.06	55.30	340.1	13766	0.434	1.35E-04	0.161	0.790	52.02	2.18	1.80	C	2.57	22.80
191.7	13985	0.056	1.08E-04	0.167	0.793	52.02	12.21	1.79	C	1.70	23.93	352.3	13753	0.467	1.64E-04	0.161	0.790	52.02	2.03	1.80	C	2.43	18.81
256.7	13983	0.082	1.29E-04	0.167	0.793	52.02	9.27	1.79	C	2.04	25.19	353.7	13736	0.506	1.96E-04	0.160	0.789	52.02	1.88	1.80	C	2.24	15.47
311.5	13977	0.113	1.55E-04	0.167	0.793	52.02	7.21	1.79	C	2.23	25.17	350.0	13700	0.607	2.68E-04	0.159	0.789	52.02	1.58	1.80	C	1.88	16.22
350.0	13965	0.193	2.19E-04	0.166	0.793	52.02	4.56	1.79	C	2.04	19.35	96.6	13876	0.017	8.11E-05	0.166	0.793	52.02	23.59	1.79	C	1.06	55.73
319.6	13953	0.303	2.99E-04	0.166	0.793	52.02	3.04	1.79	C	1.55	21.64	193.7	13872	0.058	1.10E-04	0.166	0.793	52.02	11.99	1.79	C	1.72	23.95
210.1	13868	0.354	5.41E-05	0.163	0.791	52.02	2.63	1.79	C	2.18	68.55	260.3	13870	0.084	1.31E-04	0.166	0.793	52.02	9.10	1.79	C	2.07	25.26
283.4	13846	0.382	8.63E-05	0.162	0.791	52.02	2.46	1.79	C	2.55	29.56	346.0	13864	0.115	1.57E-04	0.166	0.792	52.02	7.09	1.79	C	2.25	25.34
331.1	13821	0.429	1.33E-04	0.162	0.790	52.02	2.20	1.80	C	2.51	22.45	354.0	13851	0.197	2.22E-04	0.165	0.792	52.02	4.49	1.79	C	2.06	19.38
343.3	13809	0.462	1.62E-04	0.161	0.790	52.02	2.05	1.80	C	2.38	18.55	321.4	13839	0.308	3.02E-04	0.165	0.792	52.02	3.00	1.79	C	1.56	21.66
344.9	13791	0.501	1.93E-04	0.161	0.790	52.02	1.90	1.80	C	2.19	15.28	213.4	13755	0.360	5.58E-05	0.162	0.790	52.02	2.60	1.79	C	2.21	67.62
341.4	13755	0.600	2.63E-04	0.160	0.789	52.02	1.60	1.80	C	1.84	16.19	285.3	13732	0.388	8.82E-05	0.161	0.790	52.02	2.42	1.80	C	2.57	29.54
95.4	14069	0.055	7.94E-05	0.168	0.794	52.02	24.50	1.79	C	1.05	54.56	332.9	13707	0.437	1.36E-04	0.161	0.790	52.02	2.17	1.80	C	2.52	22.49
191.0	14064	0.015	1.08E-04	0.168	0.794	52.02	12.35	1.79	C	1.70	23.45	345.3	13695	0.470	1.65E-04	0.160	0.789	52.02	2.02	1.80	C	2.39	18.60
256.8	14061	0.081	1.29E-04	0.167	0.794	52.02	9.36	1.79	C	2.04	24.77	347.1	13677	0.509	1.97E-04	0.160	0.789	52.02	1.87	1.80	C	2.20	15.27
312.5	14056	0.111	1.54E-04	0.167	0.793	52.02	7.28	1.79	C	2.23	24.70	344.1	13640	0.611	2.69E-04	0.158	0.788	52.02	1.57	1.80	C	1.85	16.19
351.7	14044	0.192	2.18E-04	0.167	0.793	52.02	4.59	1.79	C	2.05	18.98	83.1	12083	0.004	5.06E-05	0.164	0.792	52.02	33.29	1.79	C	1.32	62.17
320.4	14032	0.301	2.98E-04	0.167	0.793	52.02	3.06	1.79	C	1.55	21.11	138.3	12080	0.029	6.44E-05	0.164	0.792	52.02	18.23	1.79	C	1.81	26.60
207.4	13947	0.352	5.40E-05	0.164	0.791	52.02	2.65	1.79	C	2.15	66.73	172.0	12078	0.045	7.44E-05	0.164	0.792	52.02	14.27	1.79	C	2.05	26.89
278.4	13925	0.380	8.57E-05	0.163	0.791	52.02	2.47	1.79	C	2.50	29.11	201.9	12076	0.062	8.63E-05	0.164	0.792	52.02	11.43	1.79	C	2.20	26.23
326.6	13900	0.427	1.32E-04	0.162	0.791	52.02	2.21	1.79	C	2.47	22.20	235.0	12072	0.106	1.16E-04	0.164	0.792	52.02	7.62	1.79	C	2.15	21.95
339.9	13888	0.459	1.61E-04	0.162	0.790	52.02	2.07	1.80	C	2.35	18.46	232.1	12068	0.163	1.53E-04	0.164	0.792	52.02	5.31	1.79	C	1.81	26.36
342.5	13870	0.497	1.91E-04	0.161	0.790	52.02	1.91	1.80	C	2.18	15.22	252.6	12039	0.198	9.46E-05	0.163	0.791	52.02	4.48	1.79	C	2.44	46.56
341.0	13833	0.596	2.62E-04	0.160	0.789	52.02	1.61	1.80	C	1.84	16.09	277.5	12029	0.241	1.29E-04	0.162	0.791	52.02	3.76	1.79	C	2.33	22.83
96.4	14002	0.016	8.02E-05	0.166	0.793	52.02	24.12	1.79	C	1.06	56.26	308.1	12018	0.310	1.92E-04	0.162	0.790	52.02	2.98	1.79	C	2.12	17.27
193.7	13997	0.056	1.09E-04	0.166	0.793	52.02	12.19	1.79	C	1.72	23.98	321.9	12013	0.357	2.33E-04	0.162	0.790	52.02	2.62	1.80	C	2.00	14.38
260.2	13995	0.082	1.30E-04	0.166	0.793	52.02	9.25	1.79	C	2.07	25.25	329.3	12001	0.412	2.80E-04	0.161	0.790	52.02	2.29	1.80	C	1.85	11.90
316.0	13989	0.113	1.55E-04	0.166	0.793	52.02	7.20	1.79	C	2.26	25.30	342.0</											

199.4	12080	0.061	8.62E-05	0.164	0.792	52.02	11.51	1.79	C	2.17	25.66	338.8	11980	0.625	3.51E-04	0.160	0.790	52.02	1.54	1.80	C	1.68	13.42
234.4	12076	0.105	1.16E-04	0.164	0.792	52.02	7.66	1.79	C	2.15	21.59	87.6	12082	0.012	7.14E-05	0.165	0.792	52.02	26.60	1.79	C	1.14	64.24
234.1	12072	0.162	1.53E-04	0.164	0.792	52.02	5.33	1.79	C	1.83	26.15	162.0	12078	0.048	9.59E-05	0.165	0.792	52.02	13.58	1.79	C	1.71	24.85
254.3	12044	0.197	9.39E-05	0.163	0.791	52.02	4.50	1.79	C	2.46	47.60	210.0	12076	0.071	1.13E-04	0.165	0.792	52.02	10.36	1.79	C	1.99	25.09
278.7	12034	0.240	1.29E-04	0.163	0.791	52.02	3.77	1.79	C	2.34	23.03	252.3	12073	0.098	1.34E-04	0.165	0.792	52.02	8.11	1.79	C	2.16	24.57
307.9	12023	0.309	1.92E-04	0.162	0.791	52.02	2.99	1.79	C	2.12	17.32	293.3	12066	0.166	1.85E-04	0.165	0.792	52.02	5.21	1.79	C	2.08	19.94
321.1	12018	0.355	2.33E-04	0.162	0.791	52.02	2.63	1.79	C	1.99	14.42	281.4	12059	0.258	2.47E-04	0.165	0.792	52.02	3.53	1.79	C	1.69	23.99
327.8	12006	0.411	2.79E-04	0.162	0.790	52.02	2.29	1.80	C	1.84	11.90	240.2	12013	0.305	8.16E-05	0.163	0.791	52.02	3.03	1.79	C	2.43	56.48
339.6	11982	0.556	3.91E-04	0.161	0.790	52.02	1.72	1.80	C	1.57	12.80	279.3	11999	0.344	1.19E-04	0.162	0.791	52.02	2.71	1.79	C	2.43	24.45
81.2	12030	0.005	5.08E-05	0.165	0.792	52.02	32.81	1.79	C	1.29	61.80	313.7	11984	0.407	1.78E-04	0.162	0.790	52.02	2.31	1.80	C	2.26	18.29
135.5	12027	0.030	6.48E-05	0.164	0.792	52.02	18.04	1.79	C	1.77	25.84	326.9	11976	0.451	2.16E-04	0.162	0.790	52.02	2.10	1.80	C	2.13	15.16
168.8	12025	0.045	7.49E-05	0.164	0.792	52.02	14.14	1.79	C	2.01	26.02	333.3	11963	0.502	2.58E-04	0.161	0.790	52.02	1.90	1.80	C	1.98	12.59
198.8	12023	0.063	8.69E-05	0.164	0.792	52.02	11.33	1.79	C	2.16	25.38	342.6	11938	0.635	3.57E-04	0.160	0.789	52.02	1.51	1.80	C	1.69	13.73
233.0	12019	0.107	1.17E-04	0.164	0.792	52.02	7.56	1.79	C	2.13	21.27	88.3	12071	0.011	7.14E-05	0.166	0.793	52.02	26.97	1.79	C	1.15	65.03
231.5	12014	0.164	1.54E-04	0.164	0.792	52.02	5.27	1.79	C	1.81	25.67	162.8	12068	0.047	9.61E-05	0.166	0.793	52.02	13.68	1.79	C	1.71	25.02
249.4	11987	0.199	9.49E-05	0.163	0.791	52.02	4.45	1.79	C	2.42	47.20	210.7	12066	0.070	1.14E-04	0.166	0.793	52.02	10.41	1.79	C	2.00	25.14
274.7	11977	0.243	1.30E-04	0.163	0.791	52.02	3.73	1.79	C	2.30	22.65	252.8	12063	0.097	1.34E-04	0.166	0.792	52.02	8.14	1.79	C	2.17	24.68
304.6	11966	0.312	1.93E-04	0.162	0.791	52.02	2.96	1.79	C	2.10	17.10	294.2	12056	0.166	1.85E-04	0.165	0.792	52.02	5.21	1.79	C	2.08	20.01
317.9	11960	0.359	2.35E-04	0.162	0.790	52.02	2.60	1.79	C	1.97	14.20	282.9	12049	0.258	2.48E-04	0.165	0.792	52.02	3.53	1.79	C	1.69	24.10
324.7	11948	0.415	2.82E-04	0.162	0.790	52.02	2.27	1.80	C	1.82	11.74	248.4	12003	0.305	8.34E-05	0.163	0.791	52.02	3.03	1.79	C	2.49	52.69
336.4	11924	0.562	3.95E-04	0.161	0.790	52.02	1.70	1.80	C	1.55	12.62	285.5	11989	0.344	1.19E-04	0.163	0.791	52.02	2.71	1.79	C	2.48	24.80
81.1	12128	0.004	5.03E-05	0.165	0.792	52.02	33.92	1.79	C	1.29	61.74	319.2	11974	0.408	1.79E-04	0.162	0.791	52.02	2.31	1.79	C	2.30	18.64
135.2	12125	0.029	6.41E-05	0.165	0.792	52.02	18.46	1.79	C	1.77	25.81	332.2	11966	0.452	2.17E-04	0.162	0.790	52.02	2.10	1.79	C	2.16	15.47
168.3	12123	0.044	7.41E-05	0.165	0.792	52.02	14.42	1.79	C	2.01	25.97	338.5	11954	0.503	2.59E-04	0.162	0.790	52.02	1.89	1.80	C	2.00	12.84
198.1	12121	0.061	8.60E-05	0.165	0.792	52.02	11.53	1.79	C	2.16	25.16	347.7	11929	0.637	3.60E-04	0.161	0.790	52.02	1.51	1.80	C	1.70	13.60
231.7	12117	0.105	1.16E-04	0.165	0.792	52.02	7.67	1.79	C	2.12	21.20	88.3	12131	0.011	7.14E-05	0.166	0.793	52.02	27.21	1.79	C	1.15	64.66
229.6	12112	0.162	1.53E-04	0.164	0.792	52.02	5.34	1.79	C	1.79	25.46	162.4	12127	0.047	9.61E-05	0.166	0.793	52.02	13.74	1.79	C	1.70	25.01
245.9	12084	0.197	9.37E-05	0.163	0.791	52.02	4.51	1.79	C	2.38	46.85	210.0	12126	0.070	1.14E-04	0.166	0.793	52.02	10.44	1.79	C	1.98	25.17
269.6	12074	0.240	1.29E-04	0.163	0.791	52.02	3.78	1.79	C	2.26	22.23	252.0	12122	0.097	1.34E-04	0.166	0.793	52.02	8.15	1.79	C	2.15	24.65
300.0	12062	0.308	1.91E-04	0.162	0.791	52.02	3.00	1.79	C	2.07	16.83	294.3	12116	0.166	1.86E-04	0.165	0.792	52.02	5.22	1.79	C	2.07	20.01
314.3	12057	0.354	2.32E-04	0.162	0.791	52.02	2.63	1.79	C	1.95	14.04	284.4	12109	0.258	2.49E-04	0.165	0.792	52.02	3.53	1.79	C	1.69	24.20
322.3	12045	0.410	2.78E-04	0.162	0.790	52.02	2.30	1.80	C	1.81	11.65	245.1	12061	0.305	8.38E-05	0.163	0.791	52.02	3.02	1.79	C	2.45	58.15
336.5	12020	0.554	3.89E-04	0.161	0.790	52.02	1.73	1.80	C	1.56	12.64	279.7	12047	0.345	1.21E-04	0.163	0.791	52.02	2.70	1.79	C	2.41	25.99
81.6	12147	0.004	5.04E-05	0.165	0.792	52.02	33.59	1.79	C	1.30	62.47	314.9	12031	0.410	1.81E-04	0.162	0.791	52.02	2.30	1.79	C	2.24	19.69
134.8	12143	0.029	6.41E-05	0.165	0.792	52.02	18.36	1.79	C	1.76	26.14	329.8	12023	0.454	2.20E-04	0.162	0.790	52.02	2.09	1.79	C	2.13	16.39
167.2	12142	0.044	7.41E-05	0.165	0.792	52.02	14.36	1.79	C	1.99	26.22	338.8	12011	0.506	2.63E-04	0.162	0.790	52.02	1.88	1.80	C	1.98	13.61
196.4	12140	0.061	8.60E-05	0.164	0.792	52.02	11.50	1.79	C	2.14	25.43	353.3	12131	0.042	3.65E-04	0.161	0.790	52.02	1.50	1.80	C	1.71	15.33
230.2	12135	0.105	1.16E-04	0.164	0.792	52.02	7.66	1.79	C	2.10	21.32	88.1	12132	0.011	7.13E-05	0.166	0.793	52.02	27.07	1.79	C	1.15	65.25
229.5	12131	0.162	1.53E-04	0.164	0.792	52.02	5.34	1.79	C	1.79	25.98	161.4	12129	0.047	9.59E-05	0.166	0.793	52.02	13.71	1.79	C	1.70	25.00
241.0	12101	0.197	9.44E-05	0.163	0.791	52.02	4.50	1.79	C	2.32	45.67	208.3	12127	0.070	1.13E-04	0.166	0.792	52.02	10.43	1.79	C	1.97	25.10
266.1	12090	0.240	1.29E-04	0.163	0.791	52.02	3.77	1.79	C	2.23	22.23	249.5	12123	0.097	1.34E-04	0.166	0.792	52.02	8.16	1.79	C	2.13	24.54
297.5	12079	0.309	1.91E-04	0.162	0.791	52.02	3.00	1.79	C	2.05	16.91	290.6	12116	0.166	1.84E-04	0.165	0.792	52.02	5.23	1.79	C	2.06	19.85
311.9	12073	0.355	2.32E-04	0.162	0.790	52.02	2.63	1.79	C	1.94	14.12	280.5	12110	0.257	2.47E-04	0.165	0.792	52.02	3.54	1.79	C	1.68	24.16
320.1	12061	0.410	2.79E-04	0.162	0.790	52.02	2.30	1.80	C	1.79	11.69	232.9	12061	0.304	8.08E-05	0.163	0.791	52.02	3.04	1.79	C	2.36	63.01
334.2	12036	0.555	3.91E-04	0.161	0.790	52.02	1.72	1.80	C	1.54	12.63	272.4	12046	0.342	1.19E-04	0.163	0.791	52.02	2.72	1.79	C	2.37	26.15
87.9	12127	0.011	7.04E-05	0.166	0.792	52.02	27.22	1.79	C	1.15	64.44	311.1	12030	0.407	1.79E-04	0.162	0.790	52.02	2.32	1.79	C	2.23	19.86
161.7	12123	0.047	9.48E-05	0.165	0.792	52.02	13.83	1.79	C	1.71	24.78	327.3	12022	0.450	2.17E-04	0.162	0.790	52.02	2.10	1.80	C	2.12	16.53
208.9	12122	0.069	1.12E-04	0.165	0.792	52.02	10.53	1.79	C	1.99	24.90	337.3	12010	0.502	2.60E-04	0.161	0.790	52.02	1.90	1.80	C	1.99	13.79
250.5	12119	0.096	1.32E-04	0.165	0.792	52.02	8.24	1.79	C	2.16	24.46	353.2	11985	0.636	3.59E-04	0.160	0.789	52.02	1.51	1.80	C	1.73	16.01
291.6	12112	0.164	1.82E-04	0.165	0.792	52.02	5.28	1.79	C	2.08	19.84	88.8	12136	0.011	7.09E-05	0.166	0.793	52.02	27.19	1.79	C	1.16	64.85
280.9	12105	0.254	2.44E-04	0.165	0.792	52.02	3.58	1.79	C	1.69	23.92	162.3	12132	0.047	9.52E-05	0.166	0.793	52.02	13.79	1.79	C	1.71	25.15
249.5	12058	0.300	8.10E-05	0.163	0.791	52.02	3.07	1.79	C	2.52	53.37	209.4	12131	0.069	1.12E-04	0.166	0.793	52.02	10.50	1.79	C	1.99	25.26
286.2	12045	0.339	1.15E-04	0.162	0.791	52.02	2.75	1.79	C	2.52	25.30												

289.8	12031	0.423	9.14E-05	0.162	0.790	52.02	2.23	1.80	C	2.84	32.79	285.4	13974	0.110	1.52E-04	0.166	0.792	52.02	7.36	1.79	C	2.06	23.79
322.1	12012	0.472	1.38E-04	0.161	0.790	52.02	2.01	1.80	C	2.66	24.40	332.0	13962	0.190	2.16E-04	0.165	0.792	52.02	4.64	1.79	C	1.96	18.75
328.8	12003	0.506	1.66E-04	0.161	0.790	52.02	1.88	1.80	C	2.49	20.05	316.6	13950	0.298	2.96E-04	0.165	0.792	52.02	3.09	1.79	C	1.55	21.85
328.2	11991	0.545	1.96E-04	0.160	0.789	52.02	1.75	1.80	C	2.28	16.48	230.3	13865	0.349	5.79E-05	0.162	0.790	52.02	2.67	1.79	C	2.35	64.60
322.5	11966	0.645	2.64E-04	0.159	0.789	52.02	1.49	1.80	C	1.91	17.86	274.9	13842	0.378	8.75E-05	0.161	0.790	52.02	2.48	1.80	C	2.46	28.13
93.4	12135	0.019	8.80E-05	0.166	0.792	52.02	22.10	1.79	C	1.07	58.15	307.4	13818	0.426	1.33E-04	0.161	0.790	52.02	2.22	1.80	C	2.33	20.86
177.8	12131	0.064	1.20E-04	0.165	0.792	52.02	11.12	1.79	C	1.64	23.97	318.0	13805	0.458	1.60E-04	0.160	0.789	52.02	2.07	1.80	C	2.21	17.31
233.9	12129	0.093	1.44E-04	0.165	0.792	52.02	8.42	1.79	C	1.93	24.66	320.9	13787	0.496	1.91E-04	0.160	0.789	52.02	1.92	1.80	C	2.05	14.28
283.0	12125	0.127	1.72E-04	0.165	0.792	52.02	6.54	1.79	C	2.10	24.50	323.7	13750	0.595	2.62E-04	0.158	0.788	52.02	1.62	1.80	C	1.75	15.37
329.4	12116	0.217	2.43E-04	0.165	0.792	52.02	4.13	1.79	C	1.99	19.40	93.4	14018	0.015	7.77E-05	0.166	0.793	52.02	24.68	1.79	C	1.04	56.06
315.4	12106	0.338	3.31E-04	0.165	0.792	52.02	2.75	1.79	C	1.59	22.76	178.4	14013	0.054	1.06E-04	0.166	0.793	52.02	12.52	1.79	C	1.61	23.62
224.7	12043	0.394	5.77E-05	0.162	0.791	52.02	2.39	1.79	C	2.56	77.88	235.7	14011	0.079	1.27E-04	0.166	0.793	52.02	9.50	1.79	C	1.90	24.42
286.9	12026	0.423	9.20E-05	0.162	0.790	52.02	2.23	1.80	C	2.81	32.25	285.8	14006	0.110	1.52E-04	0.166	0.793	52.02	7.38	1.79	C	2.07	24.27
320.8	12008	0.473	1.40E-04	0.161	0.790	52.02	2.01	1.80	C	2.63	23.89	332.9	13994	0.189	2.16E-04	0.165	0.792	52.02	4.65	1.79	C	1.96	19.11
328.1	11999	0.507	1.68E-04	0.160	0.790	52.02	1.88	1.80	C	2.47	19.75	318.2	13982	0.297	2.96E-04	0.165	0.792	52.02	3.10	1.79	C	1.56	22.19
327.3	11986	0.547	1.98E-04	0.160	0.789	52.02	1.75	1.80	C	2.27	16.26	232.2	13897	0.349	5.78E-05	0.162	0.791	52.02	2.67	1.79	C	2.36	65.07
321.4	11960	0.648	2.66E-04	0.159	0.789	52.02	1.49	1.80	C	1.90	17.88	274.7	13875	0.377	8.71E-05	0.162	0.790	52.02	2.49	1.80	C	2.46	28.20
117.3	12000	0.013	4.44E-05	0.164	0.792	52.02	26.05	1.79	C	1.91	49.96	306.8	13851	0.425	1.32E-04	0.161	0.790	52.02	2.22	1.80	C	2.33	21.02
91.6	11997	0.028	2.90E-05	0.164	0.791	52.02	18.56	1.79	C	1.62	51.22	317.8	13839	0.457	1.59E-04	0.160	0.790	52.02	2.08	1.80	C	2.21	17.35
90.6	11995	0.035	2.73E-05	0.164	0.791	52.02	16.66	1.79	C	1.59	45.50	321.2	13821	0.495	1.90E-04	0.160	0.789	52.02	1.93	1.80	C	2.06	14.37
100.1	11994	0.041	2.94E-05	0.164	0.791	52.02	15.12	1.79	C	1.68	37.59	325.2	13784	0.593	2.60E-04	0.159	0.789	52.02	1.62	1.80	C	1.76	15.54
147.2	11992	0.056	4.54E-05	0.164	0.791	52.02	12.22	1.79	C	2.09	33.97	93.0	14006	0.014	7.76E-05	0.166	0.793	52.02	24.87	1.79	C	1.04	56.05
211.2	11990	0.082	7.62E-05	0.164	0.791	52.02	9.33	1.79	C	2.39	28.03	177.4	14001	0.054	1.06E-04	0.166	0.793	52.02	12.57	1.79	C	1.60	23.35
236.7	11977	0.106	1.03E-04	0.163	0.791	52.02	7.59	1.79	C	2.30	22.91	234.3	13999	0.079	1.27E-04	0.166	0.793	52.02	9.52	1.79	C	1.89	24.05
280.1	11970	0.156	1.53E-04	0.163	0.791	52.02	5.51	1.79	C	2.21	17.36	284.4	13993	0.109	1.52E-04	0.166	0.793	52.02	7.40	1.79	C	2.06	23.85
315.9	11963	0.237	2.24E-04	0.163	0.791	52.02	3.81	1.79	C	2.02	13.00	332.1	13981	0.189	2.15E-04	0.165	0.792	52.02	4.66	1.79	C	1.96	18.85
329.7	11959	0.291	2.65E-04	0.162	0.791	52.02	3.16	1.79	C	1.91	11.74	318.2	13970	0.297	2.95E-04	0.165	0.792	52.02	3.10	1.79	C	1.56	21.95
335.9	11949	0.353	3.09E-04	0.162	0.790	52.02	2.64	1.79	C	1.78	11.14	231.5	13886	0.348	5.78E-05	0.162	0.791	52.02	2.68	1.79	C	2.36	63.96
345.1	11927	0.509	4.10E-04	0.161	0.790	52.02	1.87	1.80	C	1.55	10.90	274.5	13863	0.376	8.71E-05	0.162	0.790	52.02	2.49	1.80	C	2.46	27.83
93.1	12143	0.019	8.79E-05	0.166	0.793	52.02	22.30	1.79	C	1.06	58.11	306.3	13838	0.424	1.32E-04	0.161	0.790	52.02	2.23	1.80	C	2.33	20.62
176.0	12139	0.064	1.20E-04	0.166	0.793	52.02	11.18	1.79	C	1.62	23.73	316.8	13826	0.456	1.59E-04	0.160	0.790	52.02	2.08	1.80	C	2.21	17.12
231.2	12137	0.093	1.44E-04	0.166	0.792	52.02	8.45	1.79	C	1.91	24.32	320.1	13808	0.494	1.90E-04	0.160	0.789	52.02	1.93	1.80	C	2.05	14.14
279.8	12132	0.127	1.72E-04	0.165	0.792	52.02	6.56	1.79	C	2.07	24.11	323.6	13772	0.592	2.60E-04	0.159	0.789	52.02	1.62	1.80	C	1.76	15.19
327.5	12123	0.216	2.43E-04	0.165	0.792	52.02	4.13	1.79	C	1.98	19.12	93.3	14047	0.015	7.74E-05	0.166	0.793	52.02	24.73	1.79	C	1.04	56.29
315.8	12114	0.338	3.32E-04	0.165	0.792	52.02	2.75	1.79	C	1.59	22.61	177.7	14042	0.054	1.05E-04	0.166	0.793	52.02	12.56	1.79	C	1.60	23.54
221.7	12049	0.394	5.89E-05	0.162	0.791	52.02	2.38	1.79	C	2.51	72.44	234.6	14040	0.079	1.26E-04	0.166	0.793	52.02	9.53	1.79	C	1.89	24.28
276.8	12033	0.424	9.19E-05	0.162	0.790	52.02	2.23	1.80	C	2.71	31.07	284.7	14035	0.109	1.51E-04	0.166	0.793	52.02	7.41	1.79	C	2.06	24.10
310.3	12014	0.474	1.39E-04	0.161	0.790	52.02	2.00	1.80	C	2.55	23.10	332.4	14023	0.188	2.15E-04	0.165	0.792	52.02	4.67	1.79	C	1.96	19.05
318.9	12005	0.508	1.67E-04	0.161	0.790	52.02	1.88	1.80	C	2.40	19.19	318.7	14011	0.296	2.94E-04	0.165	0.792	52.02	3.11	1.79	C	1.56	22.19
320.6	11992	0.547	1.98E-04	0.160	0.789	52.02	1.75	1.80	C	2.22	15.86	228.0	13924	0.347	5.79E-05	0.162	0.791	52.02	2.68	1.79	C	2.32	63.26
319.1	11967	0.648	2.67E-04	0.159	0.789	52.02	1.49	1.80	C	1.88	17.27	269.9	13902	0.376	8.69E-05	0.161	0.790	52.02	2.49	1.80	C	2.42	27.59
93.4	12153	0.019	8.80E-05	0.166	0.793	52.02	22.45	1.79	C	1.07	57.74	302.2	13878	0.423	1.31E-04	0.161	0.790	52.02	2.23	1.80	C	2.30	20.52
178.6	12149	0.063	1.20E-04	0.166	0.793	52.02	11.21	1.79	C	1.65	23.85	313.4	13865	0.455	1.59E-04	0.160	0.789	52.02	2.08	1.80	C	2.18	16.98
235.5	12147	0.092	1.44E-04	0.166	0.793	52.02	8.46	1.79	C	1.94	24.53	317.3	13847	0.493	1.89E-04	0.160	0.789	52.02	1.93	1.80	C	2.03	14.10
285.6	12143	0.127	1.72E-04	0.166	0.793	52.02	6.56	1.79	C	2.11	24.36	322.0	13810	0.591	2.60E-04	0.158	0.788	52.02	1.63	1.80	C	1.75	15.15
332.6	12134	0.217	2.44E-04	0.165	0.792	52.02	4.13	1.79	C	2.00	19.27	93.2	14035	0.014	7.74E-05	0.166	0.793	52.02	24.83	1.79	C	1.04	56.65
317.9	12125	0.339	3.34E-04	0.165	0.792	52.02	2.74	1.79	C	1.59	22.43	177.0	14031	0.054	1.05E-04	0.166	0.793	52.02	12.58	1.79	C	1.60	23.62
238.3	12061	0.396	6.03E-05	0.163	0.791	52.02	2.38	1.79	C	2.68	70.23	233.5	14028	0.079	1.26E-04	0.166	0.793	52.02	9.54	1.79	C	1.88	24.25
290.4	12045	0.425	9.21E-05	0.162	0.790	52.02	2.22	1.79	C	2.84	32.38	283.3	14023	0.109	1.51E-04	0.166	0.793	52.02	7.42	1.79	C	2.05	24.05
320.5	12027	0.475	1.39E-04	0.161	0.790	52.02	2.00	1.80	C	2.64	23.86	331.4	14011	0.188	2.15E-04	0.165	0.792	52.02	4.68	1.79	C	1.95	19.02
327.7	12018	0.509	1.67E-04	0.161	0.790	52.02	1.87	1.80	C	2.47	19.68	318.7	13999	0.296	2.94E-04	0.165	0.792	52.02	3.11	1.79	C	1.56	22.29
328.0	12006	0.549	1.98E-04	0.161	0.790	52.02	1.74	1.80	C	2.27	16.21	228.5	13912	0.347	5.79E-05	0.162	0.791	52.02	2.68	1.79	C	2.32	63.34
324.8	11982	0.650	2.69E-04	0.160	0.789	52.02	1.48	1.80	C	1.90	17.13	270.5											

321.4	13774	0.591	2.60E-04	0.158	0.788	52.02	1.62	1.80	C	1.75	15.24
92.4	14038	0.014	7.73E-05	0.166	0.793	52.02	25.06	1.79	C	1.04	56.44
177.1	14033	0.053	1.05E-04	0.166	0.793	52.02	12.64	1.79	C	1.60	23.26
234.4	14030	0.079	1.26E-04	0.166	0.793	52.02	9.58	1.79	C	1.89	23.86
284.9	14025	0.109	1.51E-04	0.166	0.792	52.02	7.44	1.79	C	2.06	23.69
332.3	14013	0.188	2.14E-04	0.165	0.792	52.02	4.69	1.79	C	1.96	18.66
317.2	14001	0.295	2.94E-04	0.165	0.792	52.02	3.12	1.79	C	1.56	21.78
229.8	13915	0.346	5.78E-05	0.162	0.791	52.02	2.69	1.79	C	2.34	63.56
271.4	13893	0.375	8.67E-05	0.161	0.790	52.02	2.50	1.80	C	2.43	27.84
303.0	13868	0.422	1.31E-04	0.161	0.790	52.02	2.24	1.80	C	2.30	20.69
313.8	13856	0.454	1.59E-04	0.160	0.789	52.02	2.09	1.80	C	2.19	17.11
317.2	13838	0.492	1.89E-04	0.160	0.789	52.02	1.94	1.80	C	2.03	14.14
321.1	13801	0.589	2.59E-04	0.158	0.788	52.02	1.63	1.80	C	1.75	15.22
117.5	12022	0.012	4.38E-05	0.164	0.792	52.02	26.33	1.79	C	1.93	49.56
91.6	12019	0.028	2.89E-05	0.164	0.792	52.02	18.76	1.79	C	1.62	50.43
90.7	12018	0.034	2.72E-05	0.164	0.792	52.02	16.83	1.79	C	1.59	44.71
100.1	12016	0.040	2.95E-05	0.164	0.791	52.02	15.26	1.79	C	1.68	37.10
146.1	12014	0.056	4.56E-05	0.164	0.791	52.02	12.30	1.79	C	2.07	33.21
208.8	12012	0.081	7.62E-05	0.164	0.791	52.02	9.37	1.79	C	2.36	27.70
234.5	11999	0.106	1.03E-04	0.163	0.791	52.02	7.62	1.79	C	2.28	22.68
279.0	11993	0.156	1.53E-04	0.163	0.791	52.02	5.53	1.79	C	2.20	17.24
316.2	11987	0.236	2.22E-04	0.163	0.791	52.02	3.82	1.79	C	2.02	13.04
330.7	11984	0.290	2.63E-04	0.163	0.791	52.02	3.18	1.79	C	1.92	11.79
337.1	11974	0.352	3.08E-04	0.162	0.791	52.02	2.65	1.79	C	1.79	11.18
346.5	11952	0.507	4.07E-04	0.161	0.790	52.02	1.88	1.80	C	1.56	10.91
117.7	12004	0.012	4.40E-05	0.164	0.792	52.02	26.43	1.79	C	1.93	50.62
91.4	12001	0.028	2.89E-05	0.164	0.792	52.02	18.79	1.79	C	1.62	51.58
90.3	12000	0.034	2.72E-05	0.164	0.792	52.02	16.86	1.79	C	1.59	45.68
99.5	11999	0.040	2.94E-05	0.164	0.792	52.02	15.29	1.79	C	1.68	37.65
145.6	11996	0.056	4.54E-05	0.164	0.792	52.02	12.32	1.79	C	2.07	33.80
208.4	11994	0.081	7.61E-05	0.164	0.792	52.02	9.39	1.79	C	2.36	27.91
233.3	11981	0.106	1.03E-04	0.163	0.791	52.02	7.63	1.79	C	2.27	22.72
276.8	11974	0.155	1.53E-04	0.163	0.791	52.02	5.53	1.79	C	2.18	17.24
313.1	11967	0.236	2.23E-04	0.163	0.791	52.02	3.82	1.79	C	2.00	12.94
327.3	11963	0.290	2.64E-04	0.163	0.791	52.02	3.17	1.79	C	1.90	11.73
334.1	11953	0.352	3.08E-04	0.162	0.791	52.02	2.65	1.79	C	1.77	11.17
344.4	11931	0.507	4.09E-04	0.162	0.790	52.02	1.88	1.80	C	1.55	10.97
115.9	12032	0.012	4.37E-05	0.165	0.792	52.02	26.67	1.79	C	1.91	50.06
90.5	12030	0.027	2.87E-05	0.165	0.792	52.02	18.95	1.79	C	1.61	51.12
89.7	12028	0.033	2.71E-05	0.164	0.792	52.02	16.98	1.79	C	1.58	45.21
99.1	12027	0.039	2.93E-05	0.164	0.792	52.02	15.40	1.79	C	1.67	37.23
145.6	12025	0.055	4.53E-05	0.164	0.792	52.02	12.40	1.79	C	2.07	33.65
208.8	12023	0.080	7.59E-05	0.164	0.792	52.02	9.44	1.79	C	2.36	27.81
234.4	12010	0.105	1.03E-04	0.164	0.791	52.02	7.67	1.79	C	2.28	22.76
278.1	12004	0.154	1.52E-04	0.164	0.791	52.02	5.56	1.79	C	2.19	17.27
314.4	11997	0.235	2.22E-04	0.163	0.791	52.02	3.84	1.79	C	2.01	13.00
328.6	11993	0.288	2.63E-04	0.163	0.791	52.02	3.19	1.79	C	1.91	11.77
335.1	11983	0.350	3.07E-04	0.163	0.791	52.02	2.66	1.79	C	1.78	11.18
344.9	11961	0.505	4.07E-04	0.162	0.790	52.02	1.89	1.79	C	1.55	10.95
116.6	12063	0.011	4.33E-05	0.165	0.792	52.02	27.12	1.79	C	1.93	49.68
91.2	12061	0.026	2.86E-05	0.165	0.792	52.02	19.21	1.79	C	1.63	50.82
90.5	12059	0.033	2.70E-05	0.165	0.792	52.02	17.20	1.79	C	1.60	44.82
99.8	12058	0.039	2.93E-05	0.165	0.792	52.02	15.58	1.79	C	1.69	37.04
145.7	12055	0.054	4.53E-05	0.165	0.792	52.02	12.52	1.79	C	2.07	33.31
207.8	12053	0.080	7.57E-05	0.164	0.792	52.02	9.51	1.79	C	2.35	27.55
232.0	12039	0.104	1.02E-04	0.164	0.792	52.02	7.72	1.79	C	2.26	22.44
275.2	12033	0.153	1.52E-04	0.164	0.791	52.02	5.59	1.79	C	2.17	16.99
311.2	12026	0.234	2.21E-04	0.163	0.791	52.02	3.86	1.79	C	1.99	12.83
325.2	12023	0.287	2.61E-04	0.163	0.791	52.02	3.21	1.79	C	1.89	11.61
331.7	12012	0.348	3.05E-04	0.163	0.791	52.02	2.68	1.79	C	1.76	11.03
341.5	11991	0.502	4.04E-04	0.162	0.791	52.02	1.90	1.79	C	1.54	10.75
81.2	12125	0.004	5.04E-05	0.164	0.792	52.02	33.51	1.79	C	1.29	62.12
135.7	12123	0.029	6.41E-05	0.164	0.792	52.02	18.33	1.79	C	1.78	25.96
169.0	12121	0.044	7.40E-05	0.164	0.792	52.02	14.35	1.79	C	2.02	26.15
198.9	12119	0.062	8.58E-05	0.164	0.792	52.02	11.50	1.79	C	2.17	25.36
232.1	12115	0.105	1.15E-04	0.164	0.791	52.02	7.67	1.79	C	2.13	21.36
229.2	12111	0.161	1.52E-04	0.164	0.791	52.02	5.35	1.79	C	1.80	25.79
247.7	12082	0.196	9.24E-05	0.163	0.791	52.02	4.52	1.79	C	2.41	49.95
275.0	12072	0.239	1.29E-04	0.162	0.791	52.02	3.79	1.79	C	2.31	23.22
305.2	12060	0.307	1.91E-04	0.162	0.790	52.02	3.01	1.80	C	2.10	17.50
318.3	12055	0.354	2.32E-04	0.162	0.790	52.02	2.64	1.80	C	1.98	14.54
324.9	12043	0.409	2.78E-04	0.161	0.790	52.02	2.31	1.80	C	1.83	11.99
336.0	12019	0.553	3.87E-04	0.160	0.789	52.02	1.73	1.80	C	1.56	13.18
82.3	12136	0.004	5.03E-05	0.165	0.792	52.02	34.11	1.79	C	1.31	62.13
136.9	12133	0.028	6.40E-05	0.165	0.792	52.02	18.52	1.79	C	1.80	26.38
170.1	12132	0.044	7.40E-05	0.165	0.792	52.02	14.46	1.79	C	2.03	26.58
199.8	12130	0.061	8.58E-05	0.164	0.792	52.02	11.57	1.79	C	2.18	25.87
232.7	12125	0.104	1.16E-04	0.164	0.792	52.02	7.69	1.79	C	2.13	21.67
230.0	12121	0.161	1.52E-04	0.164	0.792	52.02	5.36	1.79	C	1.80	26.02
254.2	12093	0.196	9.45E-05	0.163	0.791	52.02	4.52	1.79	C	2.45	47.33
277.0	12083	0.239	1.28E-04	0.163	0.791	52.02	3.78	1.79	C	2.33	23.45
306.1	12072	0.307	1.90E-04	0.162	0.791	52.02	3.01	1.79	C	2.11	17.79
319.5	12066	0.353	2.31E-04	0.162	0.790	52.02	2.64	1.79	C	1.99	14.81
326.6	12055	0.408	2.77E-04	0.162	0.790	52.02	2.31	1.80	C	1.84	12.24
339.0	12031	0.553	3.89E-04	0.161	0.790	52.02	1.73	1.80	C	1.57	13.20

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405.6	10600	0.163	2.17E-04	0.218	0.821	120.02	4.94	3.59	C	2.55	23.41	359.9	10480	0.687	1.91E-04	0.211	0.818	120.02	1.38	3.60	C	2.57	29.51
458.4	10588	0.273	2.92E-04	0.217	0.820	120.02	3.20	3.59	C	2.44	18.88	220.9	10576	-0.001	5.98E-05	0.217	0.820	120.02	25.76	3.59	C	6.13	44.05
451.6	10577	0.417	3.85E-04	0.217	0.820	120.02	2.19	3.59	C	2.08	24.42	188.0	10586	0.022	4.60E-05	0.217	0.820	120.02	16.25	3.59	C	2.65	42.06
234.9	10502	0.480	4.42E-05	0.214	0.819	120.02	1.93	3.60	C	2.52	139.20	179.8	10584	0.032	4.50E-05	0.217	0.820	120.02	13.98	3.59	C	2.44	37.32
365.0	10483	0.505	8.31E-05	0.213	0.818	120.02	1.84	3.60	C	3.43	41.80	184.9	10582	0.042	4.79E-05	0.217	0.820	120.02	12.26	3.59	C	2.37	34.08
414.0	10463	0.551	1.23E-04	0.212	0.818	120.02	1.70	3.60	C	3.46	31.39	225.8	10579	0.066	6.52E-05	0.217	0.820	120.02	9.46	3.59	C	2.49	30.59
414.2	10452	0.580	1.42E-04	0.211	0.818	120.02	1.62	3.60	C	3.30	26.42	290.4	10576	0.100	9.71E-05	0.217	0.820	120.02	7.15	3.59	C	2.67	26.58
401.5	10440	0.613	1.60E-04	0.211	0.818	120.02	1.53	3.60	C	3.07	22.48	314.5	10559	0.131	1.25E-04	0.216	0.820	120.02	5.86	3.59	C	2.57	22.30
364.3	10415	0.691	1.94E-04	0.210	0.817	120.02	1.37	3.61	C	2.60	29.90	374.0	10552	0.190	1.76E-04	0.216	0.820	120.02	4.37	3.59	C	2.59	18.37
178.1	10629	0.018	1.26E-04	0.218	0.821	120.02	17.10	3.58	C	1.65	61.75	434.9	10544	0.281	2.47E-04	0.215	0.820	120.02	3.12	3.59	C	2.54	14.92
289.3	10624	0.081	1.61E-04	0.218	0.821	120.02	8.30	3.58	C	2.19	24.46	463.0	10540	0.340	2.89E-04	0.215	0.820	120.02	2.64	3.59	C	2.49	13.78
353.2	10621	0.119	1.87E-04	0.218	0.821	120.02	6.30	3.59	C	2.43	24.12	480.4	10529	0.407	3.33E-04	0.215	0.819	120.02	2.24	3.59	C	2.40	12.92
405.3	10615	0.163	2.17E-04	0.218	0.821	120.02	4.94	3.59	C	2.55	22.94	511.0	10506	0.575	4.35E-04	0.214	0.819	120.02	1.63	3.60	C	2.23	12.23
457.3	10604	0.273	2.92E-04	0.217	0.821	120.02	3.20	3.59	C	2.44	18.50	179.0	10536	0.021	1.28E-04	0.218	0.821	120.02	16.47	3.58	C	1.65	62.31
449.0	10593	0.416	3.84E-04	0.217	0.820	120.02	2.20	3.59	C	2.07	23.98	291.1	10530	0.084	1.64E-04	0.218	0.821	120.02	8.07	3.59	C	2.19	24.79
231.1	10516	0.479	4.39E-05	0.214	0.819	120.02	1.93	3.60	C	2.48	140.30	355.7	10527	0.123	1.90E-04	0.218	0.821	120.02	6.14	3.59	C	2.43	24.53
359.8	10498	0.504	8.27E-05	0.213	0.819	120.02	1.84	3.60	C	3.38	41.50	408.5	10522	0.168	2.21E-04	0.218	0.821	120.02	4.82	3.59	C	2.56	23.40
408.4	10477	0.549	1.23E-04	0.212	0.818	120.02	1.70	3.60	C	3.41	31.21	461.6	10510	0.280	2.96E-04	0.217	0.820	120.02	3.13	3.59	C	2.46	19.02
408.6	10466	0.579	1.42E-04	0.212	0.818	120.02	1.62	3.60	C	3.25	26.27	453.5	10499	0.425	3.89E-04	0.217	0.820	120.02	2.15	3.59	C	2.08	24.61
396.4	10454	0.612	1.59E-04	0.211	0.818	120.02	1.54	3.60	C	3.03	22.36	237.2	10424	0.488	4.63E-05	0.213	0.819	120.02	1.90	3.60	C	2.55	135.80
360.1	10429	0.689	1.93E-04	0.210	0.817	120.02	1.37	3.61	C	2.57	30.02	368.5	10405	0.515	8.64E-05	0.213	0.818	120.02	1.81	3.60	C	3.46	41.04
178.4	10574	0.019	1.27E-04	0.219	0.821	120.02	16.87	3.58	C	1.65	62.02	418.2	10384	0.563	1.28E-04	0.212	0.818	120.02	1.66	3.60	C	3.47	30.73
288.6	10568	0.082	1.62E-04	0.218	0.821	120.02	8.22	3.58	C	2.18	24.77	418.3	10374	0.593	1.48E-04	0.211	0.818	120.02	1.58	3.60	C	3.30	25.91
351.9	10565	0.120	1.88E-04	0.218	0.821	120.02	6.24	3.59	C	2.42	24.51	405.8	10362	0.628	1.67E-04	0.211	0.818	120.02	1.50	3.60	C	3.07	21.96
403.7	10559	0.164	2.18E-04	0.218	0.821	120.02	4.90	3.59	C	2.54	23.38	368.7	10337	0.709	2.03E-04	0.210	0.817	120.02	1.34	3.61	C	2.59	29.08
456.5	10548	0.275	2.94E-04	0.217	0.821	120.02	3.17	3.59	C	2.43	18.87	180.3	10543	0.020	1.27E-04	0.218	0.821	120.02	16.79	3.58	C	1.67	62.28
449.7	10537	0.419	3.87E-04	0.217	0.820	120.02	2.18	3.59	C	2.07	24.48	292.8	10537	0.083	1.64E-04	0.218	0.821	120.02	8.17	3.59	C	2.21	24.76
234.6	10462	0.483	4.49E-05	0.214	0.819	120.02	1.92	3.60	C	2.52	135.50	357.4	10534	0.121	1.90E-04	0.218	0.821	120.02	6.20	3.59	C	2.45	24.48
360.9	10443	0.508	8.33E-05	0.213	0.819	120.02	1.83	3.60	C	3.40	41.25	410.1	10529	0.166	2.20E-04	0.218	0.821	120.02	4.86	3.59	C	2.57	23.32
408.7	10422	0.554	1.23E-04	0.212	0.818	120.02	1.69	3.60	C	3.43	31.05	463.1	10518	0.278	2.96E-04	0.217	0.820	120.02	3.15	3.59	C	2.46	18.80
408.9	10412	0.584	1.42E-04	0.212	0.818	120.02	1.61	3.60	C	3.27	26.15	455.1	10507	0.423	3.89E-04	0.217	0.820	120.02	2.16	3.59	C	2.09	24.34
397.0	10399	0.617	1.61E-04	0.211	0.818	120.02	1.53	3.60	C	3.04	22.26	235.9	10431	0.487	4.61E-05	0.214	0.819	120.02	1.90	3.60	C	2.53	134.80
361.4	10375	0.695	1.95E-04	0.210	0.817	120.02	1.36	3.61	C	2.58	29.28	366.4	10413	0.513	8.56E-05	0.213	0.818	120.02	1.81	3.60	C	3.44	40.98
178.5	10613	0.018	1.26E-04	0.219	0.821	120.02	17.08	3.58	C	1.66	61.69	417.9	10392	0.560	1.27E-04	0.212	0.818	120.02	1.67	3.60	C	3.48	30.91
288.8	10607	0.081	1.62E-04	0.219	0.821	120.02	8.28	3.58	C	2.18	24.69	419.1	10382	0.591	1.47E-04	0.212	0.818	120.02	1.59	3.60	C	3.32	26.21
352.4	10604	0.119	1.88E-04	0.219	0.821	120.02	6.29	3.58	C	2.42	24.44	407.4	10370	0.625	1.66E-04	0.211	0.818	120.02	1.51	3.60	C	3.09	22.17
404.5	10598	0.163	2.18E-04	0.218	0.821	120.02	4.93	3.58	C	2.54	23.32	371.7	10345	0.705	2.02E-04	0.210	0.817	120.02	1.34	3.61	C	2.61	29.03
458.2	10587	0.274	2.93E-04	0.218	0.821	120.02	3.19	3.59	C	2.44	18.88	180.5	10550	0.020	1.28E-04	0.218	0.821	120.02	16.65	3.58	C	1.67	62.52
452.3	10576	0.418	3.87E-04	0.217	0.821	120.02	2.19	3.59	C	2.07	24.39	292.9	10545	0.083	1.64E-04	0.218	0.821	120.02	8.13	3.59	C	2.20	24.83
231.9	10501	0.481	4.42E-05	0.214	0.819	120.02	1.92	3.59	C	2.49	139.20	357.4	10542	0.122	1.90E-04	0.218	0.821	120.02	6.18	3.59	C	2.45	24.55
360.6	10482	0.507	8.25E-05	0.214	0.819	120.02	1.83	3.60	C	3.40	41.55	410.2	10536	0.167	2.20E-04	0.218	0.821	120.02	4.85	3.59	C	2.57	23.31
409.4	10462	0.552	1.22E-04	0.213	0.818	120.02	1.69	3.60	C	3.44	31.48	463.6	10525	0.278	2.96E-04	0.217	0.820	120.02	3.14	3.59	C	2.46	18.93
409.4	10451	0.581	1.41E-04	0.212	0.818	120.02	1.61	3.60	C	3.27	26.47	456.4	10513	0.424	3.89E-04	0.217	0.820	120.02	2.16	3.59	C	2.10	24.51
396.6	10439	0.614	1.59E-04	0.212	0.818	120.02	1.53	3.60	C	3.04	22.39	238.1	10438	0.487	4.54E-05	0.214	0.819	120.02	1.90	3.60	C	2.56	137.50
359.3	10414	0.691	1.93E-04	0.211	0.817	120.02	1.37	3.60	C	2.57	29.83	371.6	10420	0.513	8.52E-05	0.213	0.818	120.02	1.81	3.60	C	3.49	41.71
178.8	10622	0.019	1.26E-04	0.219	0.821	120.02	17.05	3.58	C	1.66	62.29	421.2	10399	0.560	1.26E-04	0.212	0.818	120.02	1.67	3.60	C	3.51	31.33
289.4	10616	0.081	1.62E-04	0.219	0.821	120.02	8.27	3.58	C	2.18	24.83	420.6	10389	0.591	1.46E-04	0.212	0.818	120.02	1.59	3.60	C	3.34	26.36
352.7	10613	0.119	1.88E-04	0.219	0.821	120.02	6.28	3.58	C	2.42	24.58	407.2	10377	0.625	1.65E-04	0.211	0.818	120.02	1.51	3.60	C	3.09	22.30
404.4	10608	0.163	2.18E-04	0.218	0.821	120.02	4.92	3.58	C	2.54	23.35	368.3	10352	0.705	2.00E-04	0.210	0.817	120.02	1.35	3.61	C	2.60	29.43
456.7	10596	0.274	2.93E-04	0.218	0.821	120.02	3.18	3.59	C	2.43	18.91	179.8	10571	0.020	1.27E-04	0.218	0.821	120.02	16.75	3.58	C	1.66	62.04
449.6	10585	0.418	3.86E-04	0.217	0.821	120.02	2.18	3.59	C	2.06	24.52	292.7	10566	0.083	1.63E-04	0.218	0.821	120.02	8.17	3.59	C	2.20	24.71
229.4	10510	0.481	4.40E-05	0.214	0.819	120.02	1.92	3.59	C	2.46	139.50	357.7	10563	0.121	1.89E-04	0.218	0.821	120.02	6.20	3.59	C	2.45	24.45
357.8																							

370.8	10513	0.198	1.82E-04	0.214	0.819	120.02	4.22	3.60	C	2.53	17.86	342.0	9110	0.123	1.56E-04	0.216	0.820	120.02	6.14	3.59	C	2.83	26.87
432.4	10505	0.293	2.55E-04	0.213	0.819	120.02	3.02	3.60	C	2.48	14.52	361.0	9105	0.200	1.97E-04	0.215	0.820	120.02	4.18	3.59	C	2.62	21.95
460.9	10500	0.354	2.99E-04	0.213	0.819	120.02	2.55	3.60	C	2.45	13.43	338.3	9100	0.294	2.47E-04	0.215	0.820	120.02	3.00	3.59	C	2.18	28.81
478.8	10489	0.423	3.45E-04	0.213	0.818	120.02	2.16	3.60	C	2.36	12.66	264.3	9068	0.339	7.60E-05	0.214	0.819	120.02	2.64	3.60	C	2.69	104.00
510.6	10464	0.597	4.50E-04	0.212	0.818	120.02	1.57	3.60	C	2.19	12.23	361.0	9058	0.379	1.25E-04	0.213	0.819	120.02	2.39	3.60	C	3.16	35.14
240.0	10560	0.002	6.00E-05	0.215	0.820	120.02	24.10	3.59	C	3.45	48.13	404.1	9047	0.446	1.79E-04	0.213	0.818	120.02	2.06	3.60	C	3.08	27.30
184.0	10555	0.025	4.63E-05	0.215	0.820	120.02	15.55	3.59	C	2.55	42.05	408.7	9042	0.488	2.07E-04	0.212	0.818	120.02	1.90	3.60	C	2.94	23.07
175.5	10553	0.035	4.54E-05	0.215	0.819	120.02	13.44	3.59	C	2.34	37.00	401.7	9033	0.536	2.33E-04	0.212	0.818	120.02	1.74	3.60	C	2.74	19.65
180.3	10551	0.045	4.85E-05	0.215	0.819	120.02	11.82	3.59	C	2.28	33.32	378.2	9017	0.650	2.87E-04	0.211	0.818	120.02	1.45	3.60	C	2.35	26.70
220.5	10548	0.070	6.64E-05	0.215	0.819	120.02	9.17	3.59	C	2.40	29.80	180.0	9137	0.012	1.05E-04	0.216	0.820	120.02	19.35	3.59	C	2.07	61.57
284.3	10544	0.105	9.91E-05	0.215	0.819	120.02	6.95	3.59	C	2.59	25.86	268.0	9132	0.062	1.25E-04	0.216	0.820	120.02	9.85	3.59	C	2.58	27.86
306.7	10525	0.136	1.27E-04	0.214	0.819	120.02	5.70	3.60	C	2.48	21.58	311.5	9130	0.091	1.39E-04	0.216	0.820	120.02	7.66	3.59	C	2.77	28.15
366.4	10517	0.196	1.79E-04	0.214	0.819	120.02	4.25	3.60	C	2.51	17.86	343.4	9128	0.123	1.56E-04	0.216	0.820	120.02	6.15	3.59	C	2.84	26.85
428.5	10508	0.289	2.52E-04	0.213	0.819	120.02	3.05	3.60	C	2.48	14.58	362.8	9123	0.200	1.97E-04	0.216	0.820	120.02	4.18	3.59	C	2.63	22.03
457.4	10504	0.349	2.94E-04	0.213	0.819	120.02	2.58	3.60	C	2.45	13.54	339.9	9118	0.294	2.47E-04	0.215	0.820	120.02	3.00	3.59	C	2.18	28.70
475.7	10492	0.418	3.40E-04	0.213	0.818	120.02	2.19	3.60	C	2.36	12.79	264.3	9086	0.340	7.63E-05	0.214	0.819	120.02	2.64	3.60	C	2.68	101.90
508.1	10468	0.588	4.43E-04	0.211	0.818	120.02	1.60	3.60	C	2.20	12.32	362.4	9076	0.380	1.25E-04	0.213	0.819	120.02	2.39	3.60	C	3.17	34.97
242.2	10527	0.004	6.22E-05	0.216	0.820	120.02	22.78	3.59	C	3.38	49.85	406.2	9065	0.446	1.79E-04	0.213	0.818	120.02	2.06	3.60	C	3.10	27.35
185.9	10523	0.028	4.78E-05	0.216	0.820	120.02	14.83	3.59	C	2.52	43.89	410.6	9059	0.488	2.06E-04	0.213	0.818	120.02	1.90	3.60	C	2.95	23.10
178.6	10521	0.038	4.71E-05	0.216	0.820	120.02	12.84	3.59	C	2.34	37.71	403.1	9051	0.536	2.33E-04	0.212	0.818	120.02	1.74	3.60	C	2.75	19.59
185.5	10519	0.049	5.07E-05	0.216	0.820	120.02	11.31	3.59	C	2.30	33.67	378.3	9034	0.650	2.87E-04	0.211	0.818	120.02	1.45	3.60	C	2.35	26.35
232.0	10516	0.075	7.08E-05	0.215	0.820	120.02	8.75	3.59	C	2.46	30.08	178.8	9153	0.012	1.05E-04	0.216	0.820	120.02	19.36	3.59	C	2.05	61.26
303.6	10513	0.112	1.07E-04	0.215	0.820	120.02	6.60	3.59	C	2.68	26.08	266.1	9149	0.062	1.25E-04	0.216	0.820	120.02	9.86	3.59	C	2.56	27.72
328.1	10493	0.147	1.38E-04	0.215	0.819	120.02	5.39	3.59	C	2.56	21.77	309.6	9147	0.091	1.39E-04	0.216	0.820	120.02	7.67	3.59	C	2.75	28.00
392.4	10484	0.212	1.96E-04	0.214	0.819	120.02	3.99	3.60	C	2.59	17.78	341.8	9144	0.123	1.56E-04	0.216	0.820	120.02	6.16	3.59	C	2.83	26.85
458.5	10475	0.313	2.75E-04	0.214	0.819	120.02	2.84	3.60	C	2.54	14.52	362.2	9139	0.199	1.97E-04	0.216	0.820	120.02	4.19	3.59	C	2.62	22.04
489.1	10470	0.379	3.22E-04	0.214	0.819	120.02	2.39	3.60	C	2.50	13.41	340.0	9134	0.293	2.47E-04	0.216	0.820	120.02	3.01	3.59	C	2.18	28.72
508.7	10458	0.454	3.72E-04	0.213	0.819	120.02	2.03	3.60	C	2.41	12.76	269.6	9102	0.339	7.77E-05	0.214	0.819	120.02	2.64	3.60	C	2.72	97.99
543.4	10434	0.640	4.85E-04	0.212	0.818	120.02	1.47	3.60	C	2.23	12.44	360.5	9092	0.379	1.25E-04	0.213	0.819	120.02	2.39	3.60	C	3.15	34.75
246.9	10580	0.003	6.12E-05	0.217	0.820	120.02	23.53	3.59	C	3.49	49.89	401.8	9081	0.445	1.78E-04	0.213	0.819	120.02	2.07	3.60	C	3.06	27.05
187.6	10575	0.026	4.68E-05	0.217	0.820	120.02	15.24	3.59	C	2.58	43.55	406.4	9075	0.488	2.06E-04	0.213	0.818	120.02	1.90	3.60	C	2.92	22.86
178.7	10573	0.036	4.58E-05	0.216	0.820	120.02	13.19	3.59	C	2.37	38.11	399.9	9067	0.535	2.33E-04	0.212	0.818	120.02	1.74	3.60	C	2.73	19.39
183.8	10571	0.047	4.90E-05	0.216	0.820	120.02	11.62	3.59	C	2.31	34.07	377.9	9050	0.649	2.88E-04	0.211	0.818	120.02	1.45	3.60	C	2.34	25.66
226.6	10567	0.071	6.78E-05	0.216	0.820	120.02	9.01	3.59	C	2.44	30.42	180.2	9149	0.012	1.05E-04	0.217	0.820	120.02	19.39	3.59	C	2.07	61.59
294.2	10564	0.107	1.02E-04	0.216	0.820	120.02	6.82	3.59	C	2.64	26.35	268.3	9145	0.062	1.25E-04	0.216	0.820	120.02	9.86	3.59	C	2.58	28.01
319.8	10546	0.140	1.32E-04	0.215	0.820	120.02	5.58	3.59	C	2.55	22.08	312.0	9143	0.091	1.39E-04	0.216	0.820	120.02	7.66	3.59	C	2.77	28.35
382.5	10539	0.202	1.87E-04	0.215	0.819	120.02	4.15	3.59	C	2.57	18.10	344.2	9140	0.123	1.56E-04	0.216	0.820	120.02	6.16	3.59	C	2.85	27.24
447.2	10530	0.299	2.63E-04	0.215	0.819	120.02	2.96	3.59	C	2.53	14.75	363.9	9135	0.199	1.97E-04	0.216	0.820	120.02	4.19	3.59	C	2.64	22.33
477.2	10526	0.361	3.07E-04	0.214	0.819	120.02	2.50	3.59	C	2.49	13.65	340.8	9130	0.293	2.46E-04	0.216	0.820	120.02	3.01	3.59	C	2.19	29.04
496.0	10514	0.433	3.55E-04	0.214	0.819	120.02	2.12	3.60	C	2.40	12.89	267.8	9098	0.339	7.70E-05	0.214	0.819	120.02	2.65	3.60	C	2.71	99.88
529.2	10490	0.612	4.64E-04	0.213	0.819	120.02	1.54	3.60	C	2.23	12.53	361.1	9088	0.379	1.25E-04	0.214	0.819	120.02	2.39	3.60	C	3.15	34.87
242.0	10624	0.002	6.08E-05	0.217	0.820	120.02	23.99	3.59	C	3.45	48.47	402.7	9077	0.445	1.79E-04	0.213	0.819	120.02	2.07	3.60	C	3.07	27.14
185.9	10620	0.025	4.65E-05	0.217	0.820	120.02	15.47	3.59	C	2.56	43.09	407.2	9071	0.488	2.06E-04	0.213	0.818	120.02	1.90	3.60	C	2.92	22.94
177.7	10617	0.035	4.55E-05	0.217	0.820	120.02	13.38	3.59	C	2.36	37.48	400.4	9063	0.536	2.33E-04	0.212	0.818	120.02	1.74	3.60	C	2.73	19.46
183.1	10616	0.045	4.86E-05	0.217	0.820	120.02	11.78	3.59	C	2.31	33.84	377.6	9046	0.649	2.88E-04	0.211	0.818	120.02	1.45	3.60	C	2.34	25.88
225.9	10612	0.070	6.70E-05	0.217	0.820	120.02	9.13	3.59	C	2.44	30.45	180.7	9168	0.012	1.05E-04	0.217	0.820	120.02	19.45	3.59	C	2.08	61.66
293.4	10609	0.105	1.01E-04	0.216	0.820	120.02	6.91	3.59	C	2.65	26.34	269.1	9164	0.062	1.25E-04	0.216	0.820	120.02	9.88	3.59	C	2.58	28.01
319.9	10592	0.137	1.30E-04	0.216	0.820	120.02	5.66	3.59	C	2.56	22.18	312.7	9162	0.091	1.39E-04	0.216	0.820	120.02	7.67	3.59	C	2.77	28.34
382.2	10585	0.198	1.84E-04	0.215	0.820	120.02	4.21	3.59	C	2.58	18.17	344.6	9159	0.123	1.56E-04	0.216	0.820	120.02	6.16	3.59	C	2.85	27.23
446.2	10576	0.294	2.58E-04	0.215	0.819	120.02	3.00	3.59	C	2.54	14.79	363.6	9154	0.199	1.97E-04	0.216	0.820	120.02	4.19	3.59	C	2.63	22.22
475.8	10572	0.355	3.02E-04	0.215	0.819	120.02	2.53	3.59	C	2.50	13.67	340.1	9149	0.293	2.46E-04	0.216	0.820	120.02	3.01	3.59	C	2.18	28.93
494.1	10560	0.426	3.49E-04	0.214	0.819	120.02	2.15	3.59	C	2.41	12.92	271.4	9118	0.339	7.74E-05	0.214	0.819	120.02	2.65	3.59	C	2.74	98.38
526.5	10536	0.601	4.56E-04	0.213	0.819																		

463.3	9098	0.545	4.03E-04	0.213	0.819	120.02	1.71	3.60	C	2.31	14.20	369.6	9022	0.580	7.43E-05	0.213	0.819	120.02	1.62	3.60	C	4.19	52.94
182.2	9117	0.012	1.06E-04	0.217	0.820	120.02	19.20	3.59	C	2.09	62.10	406.3	9007	0.620	1.08E-04	0.213	0.818	120.02	1.52	3.60	C	4.11	39.43
270.5	9113	0.063	1.26E-04	0.217	0.820	120.02	9.77	3.59	C	2.59	28.20	402.1	9000	0.646	1.24E-04	0.212	0.818	120.02	1.46	3.60	C	3.89	33.37
314.3	9111	0.092	1.41E-04	0.217	0.820	120.02	7.59	3.59	C	2.78	28.38	388.9	8992	0.675	1.38E-04	0.212	0.818	120.02	1.40	3.60	C	3.62	28.78
346.6	9108	0.124	1.58E-04	0.217	0.820	120.02	6.10	3.59	C	2.86	27.24	350.6	8976	0.741	1.64E-04	0.211	0.818	120.02	1.28	3.60	C	3.07	37.43
367.3	9103	0.202	1.99E-04	0.216	0.820	120.02	4.14	3.59	C	2.65	22.32	191.0	9116	0.031	1.49E-04	0.218	0.821	120.02	14.17	3.58	C	1.75	58.81
345.4	9098	0.297	2.50E-04	0.216	0.820	120.02	2.97	3.59	C	2.21	29.06	307.8	9112	0.104	1.90E-04	0.218	0.821	120.02	6.95	3.59	C	2.35	25.68
266.8	9066	0.344	7.75E-05	0.215	0.819	120.02	2.61	3.59	C	2.70	101.90	372.0	9109	0.149	2.18E-04	0.218	0.821	120.02	5.30	3.59	C	2.60	26.05
363.5	9056	0.384	1.27E-04	0.214	0.819	120.02	2.36	3.60	C	3.17	34.85	421.6	9105	0.200	2.51E-04	0.218	0.821	120.02	4.17	3.59	C	2.71	25.25
408.3	9045	0.451	1.82E-04	0.214	0.819	120.02	2.04	3.60	C	3.10	27.06	463.2	9096	0.326	3.33E-04	0.217	0.820	120.02	2.73	3.59	C	2.54	20.22
413.7	9039	0.494	2.10E-04	0.213	0.819	120.02	1.88	3.60	C	2.96	22.86	444.8	9087	0.489	4.33E-04	0.217	0.820	120.02	1.89	3.59	C	2.12	25.36
407.4	9031	0.543	2.38E-04	0.213	0.818	120.02	1.72	3.60	C	2.76	19.38	240.6	9033	0.557	3.91E-05	0.214	0.819	120.02	1.68	3.60	C	3.13	167.30
385.0	9014	0.659	2.94E-04	0.212	0.818	120.02	1.43	3.60	C	2.36	26.00	365.2	9020	0.580	7.38E-05	0.214	0.819	120.02	1.62	3.60	C	4.14	52.62
181.0	9127	0.012	1.05E-04	0.217	0.820	120.02	19.24	3.59	C	2.07	61.96	406.3	9005	0.620	1.08E-04	0.213	0.818	120.02	1.52	3.60	C	4.11	39.59
269.5	9123	0.063	1.26E-04	0.217	0.820	120.02	9.78	3.59	C	2.58	28.07	403.8	8998	0.646	1.24E-04	0.212	0.818	120.02	1.46	3.60	C	3.91	33.77
313.6	9121	0.092	1.41E-04	0.217	0.820	120.02	7.59	3.59	C	2.77	28.22	391.3	8990	0.674	1.38E-04	0.212	0.818	120.02	1.40	3.60	C	3.65	29.10
346.6	9118	0.124	1.58E-04	0.217	0.820	120.02	6.10	3.59	C	2.85	27.09	353.7	8974	0.740	1.64E-04	0.211	0.818	120.02	1.28	3.60	C	3.11	38.31
368.3	9113	0.202	2.00E-04	0.217	0.820	120.02	4.14	3.59	C	2.65	22.21	190.8	9150	0.030	1.49E-04	0.218	0.821	120.02	14.30	3.58	C	1.75	59.27
346.9	9108	0.298	2.52E-04	0.216	0.820	120.02	2.96	3.59	C	2.21	28.88	306.8	9145	0.103	1.89E-04	0.218	0.821	120.02	7.00	3.58	C	2.34	25.62
265.6	9076	0.345	7.77E-05	0.215	0.819	120.02	2.61	3.59	C	2.69	99.37	370.7	9143	0.148	2.17E-04	0.218	0.821	120.02	5.33	3.59	C	2.59	25.92
363.5	9066	0.385	1.27E-04	0.214	0.819	120.02	2.36	3.59	C	3.17	34.74	420.6	9139	0.198	2.50E-04	0.218	0.821	120.02	4.20	3.59	C	2.70	25.09
409.2	9055	0.452	1.81E-04	0.214	0.819	120.02	2.04	3.60	C	3.11	27.01	463.7	9130	0.325	3.32E-04	0.217	0.821	120.02	2.75	3.59	C	2.55	20.18
414.8	9050	0.495	2.09E-04	0.213	0.819	120.02	1.87	3.60	C	2.96	22.95	446.8	9121	0.486	4.32E-04	0.217	0.820	120.02	1.90	3.59	C	2.13	25.48
408.5	9042	0.544	2.37E-04	0.213	0.819	120.02	1.72	3.60	C	2.77	19.45	240.9	9065	0.554	3.94E-05	0.214	0.819	120.02	1.68	3.59	C	3.11	160.40
385.9	9025	0.659	2.93E-04	0.212	0.818	120.02	1.43	3.60	C	2.37	25.76	359.3	9052	0.577	7.26E-05	0.214	0.819	120.02	1.62	3.60	C	4.08	52.44
189.5	9169	0.030	1.47E-04	0.218	0.821	120.02	14.40	3.59	C	1.75	58.56	396.6	9038	0.616	1.06E-04	0.213	0.819	120.02	1.53	3.60	C	4.03	39.50
302.6	9165	0.102	1.87E-04	0.218	0.821	120.02	7.05	3.59	C	2.31	25.45	392.9	9030	0.642	1.22E-04	0.213	0.818	120.02	1.47	3.60	C	3.82	33.40
364.4	9162	0.146	2.15E-04	0.217	0.821	120.02	5.38	3.59	C	2.55	25.69	379.6	9023	0.670	1.36E-04	0.212	0.818	120.02	1.41	3.60	C	3.55	28.57
412.5	9158	0.196	2.48E-04	0.217	0.820	120.02	4.23	3.59	C	2.66	24.88	341.9	9007	0.735	1.62E-04	0.211	0.818	120.02	1.29	3.60	C	3.00	36.97
454.2	9149	0.321	3.29E-04	0.217	0.820	120.02	2.77	3.59	C	2.50	19.97	205.5	9193	0.003	5.87E-05	0.216	0.820	120.02	23.60	3.59	C	3.27	47.92
438.5	9141	0.481	4.27E-04	0.216	0.820	120.02	1.92	3.59	C	2.10	25.22	174.1	9189	0.025	4.61E-05	0.216	0.820	120.02	15.42	3.59	C	2.67	44.08
236.1	9085	0.549	3.66E-05	0.214	0.819	120.02	1.70	3.60	C	3.06	169.70	171.9	9187	0.035	4.52E-05	0.216	0.820	120.02	13.35	3.59	C	2.54	40.30
359.6	9072	0.570	6.93E-05	0.213	0.819	120.02	1.64	3.60	C	4.11	54.33	180.7	9186	0.045	4.78E-05	0.216	0.820	120.02	11.77	3.59	C	2.54	38.48
394.4	9057	0.608	1.01E-04	0.212	0.818	120.02	1.55	3.60	C	4.06	40.56	223.8	9184	0.069	6.38E-05	0.216	0.820	120.02	9.19	3.59	C	2.73	35.97
388.2	9050	0.632	1.15E-04	0.212	0.818	120.02	1.49	3.60	C	3.84	34.54	285.5	9182	0.102	9.32E-05	0.216	0.820	120.02	7.06	3.59	C	2.94	31.62
372.1	9042	0.658	1.28E-04	0.212	0.818	120.02	1.44	3.60	C	3.56	29.53	306.0	9169	0.132	1.19E-04	0.215	0.820	120.02	5.85	3.59	C	2.82	26.66
328.7	9026	0.719	1.49E-04	0.211	0.818	120.02	1.32	3.60	C	3.00	39.58	356.8	9164	0.187	1.66E-04	0.215	0.819	120.02	4.42	3.59	C	2.79	21.71
189.1	9192	0.029	1.47E-04	0.218	0.821	120.02	14.50	3.59	C	1.74	59.23	405.3	9159	0.273	2.31E-04	0.215	0.819	120.02	3.21	3.59	C	2.69	17.43
303.7	9187	0.101	1.88E-04	0.218	0.821	120.02	7.08	3.59	C	2.32	25.68	426.3	9156	0.328	2.69E-04	0.215	0.819	120.02	2.73	3.59	C	2.62	15.91
366.1	9185	0.146	2.15E-04	0.218	0.821	120.02	5.39	3.59	C	2.56	26.02	438.2	9148	0.390	3.10E-04	0.214	0.819	120.02	2.33	3.59	C	2.50	14.87
414.2	9180	0.196	2.48E-04	0.218	0.821	120.02	4.24	3.59	C	2.67	25.12	458.1	9132	0.546	4.04E-04	0.214	0.819	120.02	1.71	3.60	C	2.28	14.09
453.8	9171	0.321	3.28E-04	0.217	0.820	120.02	2.78	3.59	C	2.50	20.15	190.6	9130	0.030	1.49E-04	0.218	0.821	120.02	14.22	3.58	C	1.75	59.04
435.2	9163	0.480	4.25E-04	0.217	0.820	120.02	1.92	3.59	C	2.08	25.46	306.1	9125	0.104	1.90E-04	0.218	0.821	120.02	6.96	3.59	C	2.33	25.40
238.8	9108	0.547	3.67E-05	0.214	0.819	120.02	1.71	3.60	C	3.09	169.80	369.8	9123	0.149	2.18E-04	0.218	0.821	120.02	5.31	3.59	C	2.58	25.68
361.8	9095	0.568	6.91E-05	0.213	0.819	120.02	1.65	3.60	C	4.13	55.10	419.8	9119	0.199	2.51E-04	0.218	0.821	120.02	4.18	3.59	C	2.69	24.84
397.9	9080	0.606	1.01E-04	0.213	0.818	120.02	1.55	3.60	C	4.09	41.00	463.7	9110	0.326	3.33E-04	0.217	0.821	120.02	2.73	3.59	C	2.55	20.07
392.7	9073	0.630	1.15E-04	0.212	0.818	120.02	1.50	3.60	C	3.88	34.86	447.7	9101	0.488	4.32E-04	0.217	0.820	120.02	1.89	3.59	C	2.13	25.35
377.4	9065	0.656	1.28E-04	0.212	0.818	120.02	1.44	3.60	C	3.60	29.97	236.3	9046	0.556	3.86E-05	0.214	0.819	120.02	1.68	3.59	C	3.07	167.50
335.4	9049	0.717	1.50E-04	0.211	0.818	120.02	1.32	3.60	C	3.04	39.66	358.6	9033	0.579	7.30E-05	0.214	0.819	120.02	1.62	3.60	C	4.08	52.65
189.4	9208	0.028	1.47E-04	0.218	0.821	120.02	14.61	3.58	C	1.75	58.77	398.7	9018	0.618	1.07E-04	0.213	0.819	120.02	1.52	3.60	C	4.05	39.24
303.5	9203	0.101	1.87E-04	0.218	0.821	120.02	7.10	3.58	C	2.32	25.62	396.3	9011	0.644	1.23E-04	0.213	0.818	120.02	1.47	3.60	C	3.84	33.47
365.7	9201	0.145	2.15E-04	0.218	0.821	120.02	5.41	3.59	C	2.56	25.88	383.4	9003	0.672	1.37E-04	0.212	0.818	120.02	1.41	3.60	C	3.58	28.66
413.9	9197	0.195	2.48E-04	0.218	0.821	120.02	4.25	3.59	C	2.66	25.09												

181.0	8987	0.055	4.93E-05	0.213	0.819	120.02	10.60	3.60	C	2.48	38.43
225.3	8985	0.080	6.60E-05	0.213	0.819	120.02	8.41	3.60	C	2.71	35.90
289.3	8982	0.114	9.68E-05	0.213	0.819	120.02	6.53	3.60	C	2.95	31.56
310.5	8970	0.145	1.24E-04	0.212	0.818	120.02	5.45	3.60	C	2.83	26.43
363.4	8964	0.203	1.73E-04	0.212	0.818	120.02	4.15	3.60	C	2.82	21.65
414.0	8958	0.292	2.42E-04	0.212	0.818	120.02	3.03	3.60	C	2.73	17.29
436.1	8955	0.350	2.82E-04	0.212	0.818	120.02	2.58	3.60	C	2.65	15.89
449.2	8948	0.415	3.25E-04	0.211	0.818	120.02	2.20	3.60	C	2.54	14.84
471.1	8932	0.578	4.24E-04	0.211	0.817	120.02	1.62	3.60	C	2.32	14.20
206.7	8974	0.012	6.10E-05	0.213	0.819	120.02	19.76	3.60	C	3.12	47.78
173.1	8970	0.035	4.74E-05	0.213	0.819	120.02	13.54	3.60	C	2.57	43.89
170.3	8968	0.045	4.63E-05	0.213	0.819	120.02	11.88	3.60	C	2.45	40.27
178.6	8967	0.056	4.90E-05	0.213	0.819	120.02	10.58	3.60	C	2.46	37.87
222.2	8965	0.080	6.56E-05	0.213	0.818	120.02	8.41	3.60	C	2.68	35.42
285.3	8963	0.114	9.63E-05	0.213	0.818	120.02	6.54	3.60	C	2.92	31.20
307.2	8950	0.145	1.23E-04	0.212	0.818	120.02	5.46	3.60	C	2.81	26.36
359.7	8945	0.202	1.72E-04	0.212	0.818	120.02	4.16	3.60	C	2.81	21.49
410.2	8939	0.291	2.41E-04	0.212	0.818	120.02	3.03	3.60	C	2.71	17.19
432.1	8936	0.349	2.81E-04	0.211	0.818	120.02	2.58	3.60	C	2.64	15.80
445.3	8928	0.414	3.25E-04	0.211	0.818	120.02	2.21	3.60	C	2.53	14.74
467.4	8913	0.577	4.23E-04	0.210	0.817	120.02	1.63	3.60	C	2.31	14.08
199.2	9091	0.007	5.72E-05	0.215	0.819	120.02	21.83	3.59	C	3.15	48.70
171.5	9087	0.029	4.57E-05	0.215	0.819	120.02	14.72	3.59	C	2.62	44.80
170.9	9086	0.039	4.52E-05	0.214	0.819	120.02	12.83	3.59	C	2.51	40.50
180.7	9084	0.049	4.81E-05	0.214	0.819	120.02	11.36	3.59	C	2.52	38.43
224.8	9082	0.073	6.45E-05	0.214	0.819	120.02	8.92	3.59	C	2.73	35.87
286.0	9079	0.106	9.39E-05	0.214	0.819	120.02	6.88	3.59	C	2.95	31.50
307.6	9068	0.136	1.19E-04	0.214	0.819	120.02	5.72	3.60	C	2.84	26.75
357.4	9063	0.191	1.66E-04	0.213	0.819	120.02	4.34	3.60	C	2.82	21.75
404.7	9057	0.277	2.30E-04	0.213	0.819	120.02	3.17	3.60	C	2.71	17.54
425.2	9054	0.331	2.68E-04	0.213	0.819	120.02	2.70	3.60	C	2.64	15.99
436.6	9047	0.394	3.09E-04	0.213	0.818	120.02	2.31	3.60	C	2.52	14.93
455.5	9031	0.548	4.00E-04	0.212	0.818	120.02	1.70	3.60	C	2.30	14.13
203.5	9082	0.008	5.82E-05	0.215	0.819	120.02	21.40	3.59	C	3.18	47.88
172.0	9078	0.030	4.57E-05	0.215	0.819	120.02	14.49	3.59	C	2.61	44.16
169.8	9076	0.040	4.48E-05	0.215	0.819	120.02	12.66	3.59	C	2.49	40.70
178.6	9075	0.050	4.75E-05	0.215	0.819	120.02	11.24	3.59	C	2.50	38.41
221.8	9073	0.074	6.34E-05	0.214	0.819	120.02	8.88	3.59	C	2.71	35.87
283.5	9071	0.106	9.26E-05	0.214	0.819	120.02	6.88	3.59	C	2.94	31.80
303.8	9059	0.136	1.18E-04	0.214	0.819	120.02	5.73	3.60	C	2.82	26.77
354.0	9053	0.190	1.65E-04	0.213	0.819	120.02	4.36	3.60	C	2.80	21.77
402.0	9047	0.276	2.29E-04	0.213	0.819	120.02	3.18	3.60	C	2.70	17.46
422.8	9044	0.330	2.67E-04	0.213	0.819	120.02	2.71	3.60	C	2.63	16.01
435.3	9037	0.392	3.08E-04	0.213	0.818	120.02	2.32	3.60	C	2.52	14.93
456.1	9022	0.547	4.01E-04	0.212	0.818	120.02	1.71	3.60	C	2.30	14.13
200.6	9136	0.007	5.75E-05	0.215	0.820	120.02	21.70	3.59	C	3.15	47.87
171.2	9132	0.029	4.54E-05	0.215	0.819	120.02	14.66	3.59	C	2.60	44.14
169.8	9130	0.039	4.46E-05	0.215	0.819	120.02	12.80	3.59	C	2.49	40.65
179.0	9129	0.049	4.73E-05	0.215	0.819	120.02	11.36	3.59	C	2.50	38.37
222.7	9127	0.073	6.32E-05	0.215	0.819	120.02	8.95	3.59	C	2.72	36.20
284.3	9124	0.105	9.22E-05	0.215	0.819	120.02	6.93	3.59	C	2.94	31.77
305.3	9113	0.134	1.17E-04	0.214	0.819	120.02	5.77	3.60	C	2.83	26.75
355.6	9107	0.189	1.64E-04	0.214	0.819	120.02	4.39	3.60	C	2.81	21.90
403.4	9101	0.273	2.28E-04	0.213	0.819	120.02	3.20	3.60	C	2.71	17.55
424.0	9098	0.328	2.65E-04	0.213	0.819	120.02	2.73	3.60	C	2.63	16.07
436.0	9091	0.389	3.06E-04	0.213	0.819	120.02	2.34	3.60	C	2.52	14.98
456.0	9076	0.542	3.97E-04	0.212	0.818	120.02	1.72	3.60	C	2.30	14.15

APPENDIX A4

Convective Boiling of R134a within a micro-fin tube

(file: taepure.tbl)

Nu	Re	x_g	Bo	P/P_c	T/T_c	M_s	Sv	Pr	flow	E_b	U_{w0}	265.7	8024	0.161	1.79E-04	0.088	0.745	102.03	5.73	3.76	C	2.03	12.97
107.8	8164	0.007	5.05E-05	0.091	0.748	102.03	45.74	3.74	C	1.85	47.21	341.4	7997	0.259	2.70E-04	0.087	0.744	102.03	5.67	3.77	C	2.19	10.27
59.1	8159	0.024	2.63E-05	0.091	0.747	102.03	26.24	3.74	C	0.93	52.43	378.0	7983	0.324	3.24E-04	0.087	0.744	102.03	2.96	3.77	C	2.25	9.75
50.4	8157	0.029	2.21E-05	0.091	0.747	102.03	23.00	3.74	C	0.77	53.54	388.0	7944	0.403	3.82E-04	0.086	0.743	102.03	2.40	3.78	C	2.17	9.52
53.2	8154	0.034	2.33E-05	0.091	0.747	102.03	20.64	3.74	C	0.78	41.02	405.8	7862	0.600	5.14E-04	0.083	0.741	102.03	1.63	3.79	C	2.05	9.63
92.4	8150	0.048	4.13E-05	0.091	0.747	102.03	16.13	3.74	C	1.17	30.11	100.9	8129	0.008	5.00E-05	0.091	0.747	102.03	43.34	3.74	C	1.73	46.67
167.8	8145	0.073	7.92E-05	0.090	0.747	102.03	11.48	3.74	C	1.76	22.42	56.0	8123	0.024	2.63E-05	0.091	0.747	102.03	26.13	3.74	C	0.88	52.46
197.9	8108	0.101	1.13E-04	0.089	0.746	102.03	8.67	3.75	C	1.81	17.58	48.5	8119	0.029	2.24E-05	0.090	0.747	102.03	22.88	3.74	C	0.74	53.24
268.6	8085	0.159	1.78E-04	0.089	0.746	102.03	5.79	3.76	C	2.05	13.20	52.0	8117	0.034	2.39E-05	0.090	0.747	102.03	20.50	3.75	C	0.76	39.69
346.3	8060	0.256	2.68E-04	0.088	0.745	102.03	3.71	3.76	C	2.22	10.53	91.6	8112	0.049	4.28E-05	0.090	0.747	102.03	15.92	3.75	C	1.16	28.81
383.9	8048	0.321	3.22E-04	0.088	0.745	102.03	2.99	3.76	C	2.28	9.99	166.2	8107	0.075	8.17E-05	0.090	0.747	102.03	11.27	3.75	C	1.73	21.31
393.2	8009	0.399	3.79E-04	0.086	0.743	102.03	2.42	3.77	C	2.20	9.69	192.2	8064	0.104	1.17E-04	0.089	0.746	102.03	8.47	3.76	C	1.74	16.52
409.7	7926	0.595	5.10E-04	0.084	0.741	102.03	1.64	3.79	C	2.06	9.79	258.4	8038	0.163	1.82E-04	0.088	0.745	102.03	5.64	3.76	C	1.95	12.25
106.3	8036	0.007	5.03E-05	0.091	0.747	102.03	45.89	3.74	C	1.84	47.41	330.4	8009	0.263	2.74E-04	0.087	0.744	102.03	3.62	3.77	C	2.11	9.68
59.5	8032	0.024	2.66E-05	0.090	0.747	102.03	26.31	3.74	C	0.95	52.66	365.0	7994	0.330	3.28E-04	0.087	0.744	102.03	2.91	3.77	C	2.16	9.19
51.7	8030	0.029	2.27E-05	0.090	0.747	102.03	23.02	3.75	C	0.80	53.13	375.1	7955	0.409	3.87E-04	0.086	0.743	102.03	2.37	3.78	C	2.09	8.97
55.7	8028	0.034	2.43E-05	0.090	0.747	102.03	20.59	3.75	C	0.82	39.67	392.9	7871	0.609	5.19E-04	0.083	0.741	102.03	1.61	3.80	C	1.98	9.06
98.1	8023	0.049	4.36E-05	0.090	0.747	102.03	15.93	3.75	C	1.25	29.35	107.5	8148	0.008	5.10E-05	0.091	0.748	102.03	45.34	3.74	C	1.84	47.89
177.5	8019	0.075	8.31E-05	0.090	0.747	102.03	11.22	3.75	C	1.85	22.32	59.3	8143	0.024	2.66E-05	0.091	0.748	102.03	26.00	3.74	C	0.93	53.71
207.5	7983	0.104	1.19E-04	0.089	0.746	102.03	8.44	3.75	C	1.89	17.56	50.9	8141	0.030	2.25E-05	0.091	0.747	102.03	22.78	3.74	C	0.77	54.88
280.4	7961	0.164	1.85E-04	0.088	0.745	102.03	5.61	3.76	C	2.13	13.36	54.2	8138	0.035	2.38E-05	0.091	0.747	102.03	20.42	3.74	C	0.79	41.42
359.8	7938	0.265	2.78E-04	0.088	0.745	102.03	3.59	3.76	C	2.30	10.72	95.1	8133	0.049	4.27E-05	0.091	0.747	102.03	15.89	3.74	C	1.20	30.05
398.1	7926	0.332	3.33E-04	0.087	0.744	102.03	2.89	3.77	C	2.36	10.15	172.6	8128	0.075	8.19E-05	0.090	0.747	102.03	11.24	3.74	C	1.79	22.21
406.5	7888	0.413	3.92E-04	0.086	0.743	102.03	2.35	3.77	C	2.27	9.78	202.9	8090	0.104	1.17E-04	0.089	0.746	102.03	8.47	3.75	C	1.83	17.39
421.5	7808	0.615	5.26E-04	0.084	0.741	102.03	1.59	3.79	C	2.12	9.84	272.9	8065	0.163	1.83E-04	0.089	0.745	102.03	5.64	3.76	C	2.06	12.91
102.6	8072	0.008	5.01E-05	0.091	0.747	102.03	45.58	3.74	C	1.77	47.21	349.0	8037	0.264	2.76E-04	0.088	0.745	102.03	3.60	3.76	C	2.21	10.21
57.5	8066	0.024	2.64E-05	0.090	0.747	102.03	26.21	3.75	C	0.91	52.78	385.6	8023	0.331	3.32E-04	0.087	0.744	102.03	2.90	3.77	C	2.27	9.65
50.0	8063	0.029	2.26E-05	0.090	0.747	102.03	22.94	3.75	C	0.76	53.32	395.4	7984	0.411	3.91E-04	0.086	0.743	102.03	2.35	3.77	C	2.19	9.41
53.7	8061	0.034	2.41E-05	0.090	0.747	102.03	20.53	3.75	C	0.79	39.78	412.9	7902	0.613	5.25E-04	0.084	0.741	102.03	1.60	3.79	C	2.06	9.51
94.4	8056	0.049	4.31E-05	0.090	0.747	102.03	15.92	3.75	C	1.20	29.10	106.9	8021	0.009	5.23E-05	0.090	0.746	102.03	43.09	3.75	C	1.79	48.63
170.5	8052	0.075	8.21E-05	0.090	0.747	102.03	11.25	3.75	C	1.78	21.82	60.5	8015	0.026	2.77E-05	0.090	0.746	102.03	24.91	3.75	C	0.94	53.46
198.9	8013	0.104	1.17E-04	0.089	0.746	102.03	8.47	3.76	C	1.81	17.07	52.3	8013	0.032	2.35E-05	0.089	0.746	102.03	21.83	3.75	C	0.78	53.76
268.1	7990	0.163	1.82E-04	0.088	0.745	102.03	5.64	3.76	C	2.03	12.78	55.6	8010	0.037	2.47E-05	0.089	0.746	102.03	19.57	3.75	C	0.80	40.98
343.1	7965	0.263	2.75E-04	0.087	0.744	102.03	3.61	3.77	C	2.19	10.17	95.9	8005	0.051	4.34E-05	0.089	0.746	102.03	15.28	3.75	C	1.20	30.60
379.1	7952	0.330	3.29E-04	0.087	0.744	102.03	2.91	3.77	C	2.25	9.64	172.6	7999	0.078	8.23E-05	0.089	0.746	102.03	10.91	3.75	C	1.79	23.12
387.8	7914	0.409	3.88E-04	0.086	0.743	102.03	2.37	3.78	C	2.17	9.34	201.1	7961	0.107	1.18E-04	0.088	0.745	102.03	8.27	3.76	C	1.82	18.08
403.3	7832	0.609	5.20E-04	0.083	0.741	102.03	1.61	3.79	C	2.03	9.41	270.6	7937	0.167	1.83E-04	0.087	0.744	102.03	5.55	3.77	C	2.05	13.56
101.9	8064	0.008	5.05E-05	0.091	0.747	102.03	44.50	3.74	C	1.74	47.29	345.7	7911	0.267	2.76E-04	0.086	0.743	102.03	3.57	3.77	C	2.21	10.71
57.5	8058	0.024	2.65E-05	0.090	0.747	102.03	25.79	3.75	C	0.91	53.27	381.7	7898	0.334	3.31E-04	0.086	0.743	102.03	2.88	3.78	C	2.27	10.16
50.0	8056	0.030	2.25E-05	0.090	0.747	102.03	22.61	3.75	C	0.76	54.20	390.4	7859	0.414	3.90E-04	0.085	0.742	102.03	2.34	3.78	C	2.19	9.94
54.1	8053	0.035	2.41E-05	0.090	0.747	102.03	20.28	3.75	C	0.79	40.52	405.7	7777	0.615	5.24E-04	0.082	0.740	102.03	1.59	3.80	C	2.05	10.24
96.3	8049	0.049	4.32E-05	0.090	0.747	102.03	15.77	3.75	C	1.22	29.55	107.7	8025	0.008	5.16E-05	0.090	0.747	102.03	44.79	3.75	C	1.84	48.42
175.2	8044	0.075	8.26E-05	0.090	0.747	102.03	11.16	3.75	C	1.82	22.06	61.6	8020	0.025	2.76E-05	0.090	0.746	102.03	25.59	3.75	C	0.96	52.80
202.6	8004	0.105	1.18E-04	0.089	0.746	102.03	8.40	3.76	C	1.84	17.17	53.8	8018	0.031	2.37E-05	0.090	0.746	102.03	22.34	3.75	C	0.81	52.51
270.2	7978	0.165	1.84E-04	0.088	0.745	102.03	5.59	3.76	C	2.04	12.72	57.5	8015	0.036	2.51E-05	0.090	0.746	102.03	19.96	3.75	C	0.83	39.67
341.9	7950	0.266	2.77E-04	0.087	0.744	102.03	3.58	3.77	C	2.18	10.00	98.7	8009	0.051	4.40E-05	0.089	0.746	102.03	15.46	3.75	C	1.24	30.01
375.9	7935	0.333	3.32E-04	0.087	0.744	102.03	2.88	3.77	C	2.23	9.42	175.8	8004	0.077	8.30E-05	0.089	0.746	102.03	10.96	3.75	C	1.82	23.08
384.8	7897	0.413	3.91E-04	0.085	0.743	102.03	2.34	3.78	C	2.14	9.17	205.7	7968	0.107	1.18E-04	0.088	0.745	102.03	8.30	3.76	C	1.86	18.19
400.5	7816	0.616	5.26E-04	0.083	0.741	102.03	1.59	3.80	C	2.01	9.23	277.1	7946	0.166	1.84E-04	0.087	0.744	102.03	5.56	3.77	C	2.10	13.80
106.3	8074	0.007	5.01E-05	0.091	0.747	102.03	45.86	3.74	C	1.84	47.30	354.7	7922	0.266	2.76E-04	0.087	0.744	102.03	3.57	3.77	C	2.27	10.98
59.0	8069	0.024	2.64E-05	0.090	0.747	102.03	26.33	3.74	C	0.94	52.70	391.9	7910	0.333	3.31E-04	0.086	0.743	102.03	2.88	3.77	C	2.33	10.44
51.0	8067	0.029	2.25E-05	0.090	0.747	102.03	23.04	3.75	C	0.78	53.34	399.4	7872	0.413	3.89E-04	0.085	0.742	102.03	2.35	3.78	C	2.24	10.13
54.6																							

55.4	8056	0.036	2.43E-05	0.090	0.746	102.03	19.95	3.75	C	0.80	40.95	368.8	6903	0.559	4.56E-04	0.085	0.742	102.03	1.75	3.78	C	2.15	10.33
94.6	8051	0.050	4.23E-05	0.089	0.746	102.03	15.59	3.75	C	1.19	30.61	148.2	7060	0.004	5.39E-05	0.090	0.747	102.03	54.19	3.75	C	2.92	47.40
169.8	8046	0.076	8.00E-05	0.089	0.746	102.03	11.15	3.75	C	1.77	23.03	95.1	7056	0.023	3.38E-05	0.090	0.747	102.03	26.91	3.75	C	1.63	45.45
199.4	8009	0.104	1.14E-04	0.088	0.745	102.03	8.47	3.76	C	1.82	18.06	85.4	7053	0.030	3.06E-05	0.090	0.746	102.03	22.58	3.75	C	1.40	40.40
269.7	7987	0.162	1.78E-04	0.087	0.744	102.03	5.69	3.77	C	2.06	13.52	87.6	7052	0.037	3.19E-05	0.090	0.746	102.03	19.57	3.75	C	1.36	32.89
346.6	7962	0.259	2.68E-04	0.087	0.744	102.03	3.66	3.77	C	2.24	10.75	123.4	7048	0.054	4.83E-05	0.090	0.746	102.03	14.68	3.75	C	1.66	28.86
383.8	7949	0.325	3.22E-04	0.086	0.743	102.03	2.96	3.77	C	2.30	10.24	188.0	7044	0.081	8.19E-05	0.089	0.746	102.03	10.49	3.75	C	2.13	24.39
391.9	7910	0.402	3.79E-04	0.085	0.742	102.03	2.41	3.78	C	2.21	9.95	205.8	7018	0.109	1.12E-04	0.089	0.745	102.03	8.11	3.76	C	2.07	19.29
406.4	7827	0.598	5.09E-04	0.083	0.740	102.03	1.64	3.80	C	2.07	10.14	261.1	7003	0.164	1.68E-04	0.088	0.745	102.03	5.61	3.76	C	2.23	15.08
150.3	7076	0.005	5.51E-05	0.090	0.747	102.03	52.84	3.75	C	2.91	48.19	320.1	6987	0.255	2.47E-04	0.087	0.744	102.03	3.72	3.76	C	2.34	12.07
95.1	7072	0.024	3.40E-05	0.090	0.747	102.03	26.36	3.75	C	1.62	46.50	348.3	6979	0.315	2.94E-04	0.087	0.744	102.03	3.05	3.77	C	2.37	11.32
84.6	7070	0.031	3.04E-05	0.090	0.747	102.03	22.19	3.75	C	1.37	41.63	354.1	6953	0.385	3.44E-04	0.086	0.743	102.03	2.51	3.77	C	2.27	10.71
86.0	7067	0.038	3.16E-05	0.090	0.747	102.03	19.29	3.75	C	1.33	33.86	365.5	6899	0.562	4.59E-04	0.084	0.742	102.03	1.74	3.79	C	2.12	10.63
120.7	7063	0.055	4.78E-05	0.090	0.746	102.03	14.55	3.75	C	1.62	29.50	145.5	7045	0.005	5.46E-05	0.090	0.747	102.03	53.19	3.75	C	2.84	45.94
184.6	7058	0.082	8.14E-05	0.090	0.746	102.03	10.44	3.75	C	2.09	24.45	93.2	7041	0.024	3.40E-05	0.090	0.747	102.03	26.51	3.75	C	1.59	45.20
201.7	7030	0.110	1.12E-04	0.089	0.745	102.03	8.08	3.76	C	2.02	19.27	83.5	7038	0.031	3.06E-05	0.090	0.746	102.03	22.28	3.75	C	1.36	40.28
256.1	7014	0.165	1.69E-04	0.088	0.745	102.03	5.59	3.76	C	2.19	14.86	85.6	7036	0.038	3.19E-05	0.090	0.746	102.03	19.34	3.75	C	1.32	32.64
314.3	6996	0.256	2.49E-04	0.087	0.744	102.03	3.71	3.77	C	2.29	11.81	120.7	7032	0.055	4.82E-05	0.090	0.746	102.03	14.55	3.75	C	1.63	28.36
342.1	6987	0.316	2.96E-04	0.087	0.744	102.03	3.03	3.77	C	2.32	11.09	184.6	7028	0.082	8.18E-05	0.089	0.746	102.03	10.42	3.75	C	2.09	23.53
349.9	6962	0.387	3.47E-04	0.086	0.743	102.03	2.50	3.77	C	2.24	10.62	200.1	6998	0.110	1.12E-04	0.088	0.745	102.03	8.06	3.76	C	2.01	18.42
364.5	6909	0.565	4.63E-04	0.084	0.742	102.03	1.73	3.79	C	2.11	10.69	252.8	6981	0.166	1.69E-04	0.088	0.745	102.03	5.57	3.76	C	2.16	14.24
1471.7	7002	0.006	5.50E-05	0.090	0.746	102.03	50.02	3.75	C	2.81	47.26	309.1	6962	0.256	2.48E-04	0.087	0.744	102.03	3.70	3.77	C	2.26	11.32
93.8	6998	0.025	3.41E-05	0.089	0.746	102.03	25.63	3.75	C	1.59	46.13	335.9	6952	0.316	2.95E-04	0.087	0.744	102.03	3.03	3.77	C	2.29	10.57
83.8	6996	0.032	3.07E-05	0.089	0.746	102.03	21.65	3.75	C	1.36	41.15	343.5	6927	0.387	3.46E-04	0.086	0.743	102.03	2.50	3.78	C	2.21	10.10
85.7	6994	0.039	3.19E-05	0.089	0.746	102.03	18.86	3.75	C	1.32	33.28	357.9	6873	0.565	4.61E-04	0.084	0.741	102.03	1.73	3.79	C	2.08	9.96
120.7	6990	0.056	4.83E-05	0.089	0.746	102.03	14.27	3.75	C	1.62	28.94	142.6	7077	0.003	5.35E-05	0.090	0.747	102.03	56.48	3.75	C	2.85	45.30
184.8	6985	0.083	8.21E-05	0.089	0.746	102.03	10.27	3.75	C	2.09	24.15	93.5	7073	0.022	3.38E-05	0.090	0.747	102.03	27.53	3.75	C	1.62	44.09
199.3	6956	0.112	1.12E-04	0.088	0.745	102.03	7.96	3.76	C	2.00	18.81	84.8	7071	0.029	3.07E-05	0.090	0.747	102.03	23.01	3.75	C	1.39	39.16
254.0	6940	0.167	1.69E-04	0.087	0.744	102.03	5.52	3.77	C	2.18	14.57	87.6	7069	0.036	3.21E-05	0.090	0.747	102.03	19.88	3.75	C	1.36	31.94
312.7	6923	0.258	2.50E-04	0.087	0.744	102.03	3.68	3.77	C	2.29	11.63	124.0	7065	0.053	4.85E-05	0.090	0.746	102.03	14.83	3.75	C	1.67	28.15
340.7	6914	0.319	2.97E-04	0.087	0.744	102.03	3.01	3.77	C	2.33	10.93	188.4	7062	0.081	8.19E-05	0.090	0.746	102.03	10.56	3.75	C	2.13	23.79
348.0	6889	0.390	3.48E-04	0.086	0.743	102.03	2.48	3.78	C	2.24	10.45	206.4	7036	0.109	1.12E-04	0.089	0.746	102.03	8.16	3.76	C	2.08	18.82
361.6	6835	0.569	4.64E-04	0.084	0.741	102.03	1.72	3.79	C	2.10	10.38	261.0	7022	0.164	1.68E-04	0.088	0.745	102.03	5.64	3.76	C	2.23	14.75
147.6	7019	0.006	5.50E-05	0.090	0.746	102.03	50.33	3.75	C	2.82	47.30	318.7	7006	0.253	2.46E-04	0.088	0.745	102.03	3.74	3.76	C	2.33	11.79
94.5	7014	0.025	3.41E-05	0.090	0.746	102.03	25.72	3.75	C	1.60	46.45	345.9	6998	0.313	2.93E-04	0.087	0.744	102.03	3.06	3.77	C	2.36	11.01
84.6	7012	0.032	3.06E-05	0.089	0.746	102.03	21.73	3.75	C	1.37	41.51	350.9	6972	0.383	3.42E-04	0.086	0.744	102.03	2.52	3.77	C	2.25	10.41
86.5	7010	0.039	3.18E-05	0.089	0.746	102.03	18.93	3.75	C	1.33	33.71	360.8	6918	0.559	4.56E-04	0.085	0.742	102.03	1.75	3.78	C	2.10	10.15
122.1	7006	0.056	4.80E-05	0.089	0.746	102.03	14.34	3.75	C	1.64	29.27	70.9	6995	-0.007	6.30E-05	0.091	0.745	102.03	128.95	3.76	C	2.68	58.30
187.2	7003	0.083	8.17E-05	0.089	0.746	102.03	10.32	3.75	C	2.12	24.36	133.0	7075	0.024	7.60E-05	0.091	0.748	102.03	26.23	3.74	C	1.90	22.55
202.4	6974	0.111	1.12E-04	0.088	0.745	102.03	8.00	3.76	C	2.04	19.00	150.8	7073	0.042	8.55E-05	0.091	0.748	102.03	17.87	3.74	C	1.91	21.43
257.5	6958	0.166	1.69E-04	0.088	0.745	102.03	5.55	3.76	C	2.21	14.73	165.1	7068	0.062	9.66E-05	0.091	0.747	102.03	13.17	3.74	C	1.89	19.39
316.3	6941	0.257	2.49E-04	0.087	0.744	102.03	3.69	3.77	C	2.31	11.73	184.7	7059	0.110	1.25E-04	0.090	0.747	102.03	8.05	3.74	C	1.81	16.12
344.2	6933	0.318	2.96E-04	0.087	0.744	102.03	3.02	3.77	C	2.35	10.98	191.9	7051	0.171	1.60E-04	0.090	0.747	102.03	5.41	3.75	C	1.66	24.53
351.1	6908	0.388	3.47E-04	0.086	0.743	102.03	2.49	3.78	C	2.26	10.48	202.8	6987	0.207	7.27E-05	0.088	0.745	102.03	4.53	3.76	C	2.02	67.88
364.1	6854	0.567	4.63E-04	0.084	0.741	102.03	1.72	3.79	C	2.12	10.38	232.9	6965	0.243	1.09E-04	0.087	0.744	102.03	3.89	3.77	C	2.14	23.18
140.1	7026	0.005	5.43E-05	0.090	0.746	102.03	51.53	3.75	C	2.71	45.79	275.1	6940	0.304	1.65E-04	0.086	0.744	102.03	3.15	3.77	C	2.28	17.60
90.2	7022	0.024	3.39E-05	0.089	0.746	102.03	26.15	3.75	C	1.53	44.75	297.6	6928	0.344	2.01E-04	0.086	0.743	102.03	2.79	3.78	C	2.34	14.80
81.3	7019	0.031	3.07E-05	0.089	0.746	102.03	22.02	3.75	C	1.32	39.72	305.0	6904	0.393	2.39E-04	0.085	0.742	102.03	2.46	3.78	C	2.28	12.29
83.6	7017	0.038	3.21E-05	0.089	0.746	102.03	19.14	3.75	C	1.29	32.10	322.2	6853	0.519	3.30E-04	0.083	0.741	102.03	1.88	3.79	C	2.19	14.64
118.4	7013	0.055	4.86E-05	0.089	0.746	102.03	14.41	3.75	C	1.59	27.98	67.1	6990	-0.009	6.45E-05	0.092	0.745	102.03	169.35	3.76	C	2.53	56.47
181.2	7009	0.083	8.24E-05	0.089	0.746	102.03	10.33	3.75	C	2.05	23.38	135.7	7096	0.022	7.79E-05	0.092	0.749	102.03	27.02	3.73	C	1.94	22.37
198.2	6981	0.111	1.13E-04	0.088	0.745	102.03	8.00	3.76	C	1.99	18.44	153.6	7094	0.041	8.79E-05	0.092	0.748	102.03	18.07	3.73	C	1.93	21.24
252.3	6966	0.167	1.69E-04	0.088	0.745	102.03	5.54	3.76	C	2.16													

246.7	6890	0.256	1.20E-04	0.088	0.745	102.03	3.70	3.76	C	2.24	22.41	204.9	7146	0.098	1.48E-04	0.092	0.748	102.03	8.89	3.73	C	1.93	17.66
292.6	6865	0.323	1.83E-04	0.087	0.744	102.03	2.97	3.77	C	2.38	17.12	232.6	7131	0.174	1.98E-04	0.091	0.748	102.03	5.32	3.74	C	1.87	14.32
319.3	6853	0.368	2.24E-04	0.087	0.744	102.03	2.62	3.77	C	2.45	14.48	242.5	7116	0.271	2.60E-04	0.091	0.747	102.03	3.50	3.74	C	1.72	20.76
330.0	6828	0.422	2.69E-04	0.086	0.743	102.03	2.29	3.78	C	2.39	12.00	204.1	7001	0.321	4.44E-05	0.087	0.744	102.03	2.99	3.77	C	2.07	119.50
354.9	6776	0.565	3.78E-04	0.084	0.741	102.03	1.73	3.79	C	2.31	13.86	269.6	6970	0.347	8.15E-05	0.086	0.743	102.03	2.77	3.78	C	2.58	35.62
66.5	7052	-0.009	6.33E-05	0.092	0.745	102.03	166.87	3.76	C	2.49	56.56	313.3	6935	0.395	1.32E-04	0.085	0.742	102.03	2.45	3.78	C	2.77	25.04
133.1	7158	0.022	7.59E-05	0.092	0.749	102.03	27.46	3.73	C	1.92	22.63	328.0	6917	0.428	1.62E-04	0.084	0.741	102.03	2.27	3.79	C	2.79	20.42
150.5	7156	0.040	8.54E-05	0.092	0.749	102.03	18.44	3.73	C	1.91	21.56	323.7	6891	0.468	1.94E-04	0.083	0.741	102.03	2.08	3.79	C	2.64	16.39
165.0	7151	0.060	9.69E-05	0.092	0.748	102.03	13.48	3.73	C	1.89	19.44	317.2	6836	0.570	2.65E-04	0.081	0.739	102.03	1.71	3.81	C	2.41	19.11
185.9	7142	0.108	1.26E-04	0.092	0.748	102.03	8.14	3.74	C	1.81	16.12	111.6	6895	0.002	9.03E-05	0.092	0.748	102.03	60.50	3.74	C	1.85	58.79
195.3	7134	0.170	1.63E-04	0.091	0.748	102.03	5.42	3.74	C	1.67	24.32	161.8	6890	0.047	1.16E-04	0.092	0.748	102.03	16.30	3.74	C	1.87	21.38
206.6	7068	0.208	7.97E-05	0.089	0.746	102.03	4.51	3.75	C	2.02	57.94	188.8	6887	0.074	1.34E-04	0.092	0.748	102.03	11.25	3.74	C	1.95	20.23
231.2	7045	0.247	1.15E-04	0.088	0.745	102.03	3.84	3.76	C	2.09	21.42	209.0	6880	0.106	1.54E-04	0.091	0.748	102.03	8.30	3.74	C	1.97	18.48
277.5	7019	0.311	1.76E-04	0.087	0.744	102.03	3.08	3.77	C	2.25	16.51	234.0	6866	0.185	2.05E-04	0.091	0.747	102.03	5.03	3.74	C	1.89	14.91
304.4	7006	0.354	2.15E-04	0.087	0.744	102.03	2.72	3.77	C	2.33	14.08	240.7	6852	0.285	2.67E-04	0.090	0.747	102.03	3.34	3.75	C	1.74	21.55
316.0	6980	0.407	2.59E-04	0.086	0.743	102.03	2.38	3.77	C	2.28	11.72	214.1	6739	0.336	4.80E-05	0.086	0.743	102.03	2.86	3.77	C	2.22	115.90
342.2	6925	0.544	3.63E-04	0.084	0.742	102.03	1.79	3.79	C	2.22	13.45	278.6	6708	0.364	8.76E-05	0.085	0.742	102.03	2.65	3.78	C	2.71	35.62
66.8	6951	-0.008	6.46E-05	0.092	0.746	102.03	160.64	3.76	C	2.53	57.60	322.4	6673	0.416	1.42E-04	0.084	0.741	102.03	2.33	3.79	C	2.90	25.19
134.4	7052	0.023	7.83E-05	0.092	0.749	102.03	26.69	3.73	C	1.92	22.27	337.5	6656	0.451	1.74E-04	0.083	0.741	102.03	2.15	3.79	C	2.91	20.59
152.8	7049	0.041	8.82E-05	0.092	0.748	102.03	17.90	3.73	C	1.93	21.11	334.0	6630	0.494	2.08E-04	0.083	0.740	102.03	1.97	3.80	C	2.76	16.53
168.1	7045	0.062	1.00E-04	0.092	0.748	102.03	13.08	3.74	C	1.92	19.09	329.2	6577	0.604	2.85E-04	0.081	0.738	102.03	1.62	3.81	C	2.53	19.17
189.5	7036	0.112	1.30E-04	0.092	0.748	102.03	7.90	3.74	C	1.84	15.85	111.1	7019	0.000	8.85E-05	0.092	0.749	102.03	67.40	3.73	C	1.89	57.64
198.1	7027	0.175	1.67E-04	0.091	0.748	102.03	5.27	3.74	C	1.69	23.98	159.6	7013	0.044	1.13E-04	0.092	0.748	102.03	17.05	3.73	C	1.85	21.16
217.6	6964	0.214	8.34E-05	0.089	0.746	102.03	4.38	3.75	C	2.13	56.11	186.1	7011	0.071	1.31E-04	0.092	0.748	102.03	11.69	3.73	C	1.93	19.96
238.0	6942	0.255	1.19E-04	0.088	0.745	102.03	3.72	3.76	C	2.15	21.19	206.5	7004	0.102	1.51E-04	0.092	0.748	102.03	8.59	3.74	C	1.94	18.24
283.7	6916	0.321	1.82E-04	0.087	0.744	102.03	2.99	3.77	C	2.30	16.20	233.3	6989	0.179	2.02E-04	0.091	0.748	102.03	5.16	3.74	C	1.88	14.75
311.2	6903	0.366	2.23E-04	0.087	0.744	102.03	2.63	3.77	C	2.38	13.78	242.6	6975	0.279	2.64E-04	0.091	0.747	102.03	3.41	3.74	C	1.74	21.25
324.3	6878	0.420	2.69E-04	0.086	0.743	102.03	2.30	3.77	C	2.34	11.53	207.0	6862	0.329	4.50E-05	0.087	0.744	102.03	2.92	3.77	C	2.13	124.50
354.1	6826	0.563	3.79E-04	0.084	0.742	102.03	1.73	3.79	C	2.28	13.01	279.8	6831	0.356	8.44E-05	0.086	0.743	102.03	2.71	3.78	C	2.70	36.30
71.4	6856	-0.007	6.57E-05	0.092	0.746	102.03	129.23	3.76	C	2.74	59.72	326.3	6797	0.405	1.38E-04	0.085	0.742	102.03	2.39	3.79	C	2.91	25.67
135.0	6936	0.025	8.02E-05	0.092	0.748	102.03	25.24	3.74	C	1.91	22.51	341.3	6780	0.440	1.68E-04	0.084	0.741	102.03	2.21	3.79	C	2.92	20.87
153.3	6934	0.044	9.04E-05	0.092	0.748	102.03	17.11	3.74	C	1.92	21.27	335.5	6754	0.481	2.01E-04	0.083	0.740	102.03	2.02	3.80	C	2.76	16.69
168.2	6929	0.065	1.02E-04	0.091	0.748	102.03	12.57	3.74	C	1.91	19.20	326.6	6699	0.587	2.74E-04	0.081	0.739	102.03	1.67	3.81	C	2.50	19.54
188.6	6921	0.116	1.32E-04	0.091	0.748	102.03	7.65	3.74	C	1.83	15.97	99.4	7157	-0.002	8.61E-05	0.093	0.748	102.03	80.73	3.74	C	3.70	57.46
196.3	6912	0.181	1.69E-04	0.091	0.747	102.03	5.13	3.74	C	1.69	24.46	159.3	7181	0.040	1.10E-04	0.093	0.749	102.03	18.16	3.73	C	1.86	21.18
213.0	6847	0.220	8.47E-05	0.088	0.745	102.03	4.28	3.76	C	2.10	60.39	186.0	7178	0.067	1.27E-04	0.092	0.749	102.03	12.31	3.73	C	1.93	19.96
239.0	6825	0.261	1.24E-04	0.088	0.745	102.03	3.63	3.76	C	2.17	21.31	206.6	7171	0.097	1.47E-04	0.092	0.749	102.03	8.98	3.73	C	1.94	18.12
287.8	6799	0.330	1.89E-04	0.087	0.744	102.03	2.91	3.77	C	2.34	16.27	233.5	7156	0.172	1.97E-04	0.092	0.748	102.03	5.36	3.74	C	1.87	14.64
316.3	6786	0.377	2.31E-04	0.086	0.743	102.03	2.56	3.77	C	2.42	13.82	242.5	7142	0.269	2.58E-04	0.091	0.748	102.03	3.53	3.74	C	1.72	21.18
329.5	6761	0.433	2.79E-04	0.085	0.743	102.03	2.24	3.78	C	2.38	11.54	206.8	7025	0.318	4.45E-05	0.087	0.744	102.03	3.01	3.77	C	2.09	117.40
359.1	6708	0.581	3.91E-04	0.084	0.741	102.03	1.68	3.79	C	2.32	13.38	269.7	6993	0.345	8.14E-05	0.086	0.743	102.03	2.79	3.77	C	2.57	35.22
110.3	7028	0.000	8.79E-05	0.092	0.748	102.03	66.97	3.73	C	1.88	58.05	312.3	6957	0.393	1.32E-04	0.085	0.742	102.03	2.46	3.78	C	2.75	24.95
159.5	7023	0.044	1.13E-04	0.092	0.748	102.03	17.09	3.74	C	1.85	21.29	327.0	6939	0.426	1.62E-04	0.084	0.742	102.03	2.28	3.79	C	2.77	20.36
186.2	7020	0.071	1.30E-04	0.092	0.748	102.03	11.72	3.74	C	1.93	20.15	323.8	6912	0.466	1.93E-04	0.083	0.741	102.03	2.09	3.79	C	2.64	16.34
206.4	7013	0.102	1.51E-04	0.092	0.748	102.03	8.61	3.74	C	1.94	18.41	319.2	6857	0.568	2.64E-04	0.082	0.739	102.03	1.72	3.81	C	2.42	19.04
232.0	6998	0.179	2.02E-04	0.091	0.748	102.03	5.18	3.74	C	1.87	14.82	112.3	6961	0.001	8.93E-05	0.092	0.748	102.03	64.75	3.73	C	1.89	58.46
239.9	6983	0.278	2.63E-04	0.090	0.747	102.03	3.42	3.74	C	1.72	21.29	161.8	6955	0.045	1.15E-04	0.092	0.748	102.03	16.73	3.74	C	1.87	21.31
207.3	6869	0.328	4.55E-05	0.087	0.744	102.03	2.93	3.77	C	2.13	19.70	188.3	6952	0.072	1.32E-04	0.092	0.748	102.03	11.49	3.74	C	1.95	20.16
266.6	6838	0.355	8.38E-05	0.085	0.743	102.03	2.71	3.78	C	2.57	35.20	208.4	6945	0.104	1.53E-04	0.092	0.748	102.03	8.46	3.74	C	1.96	18.40
309.3	6802	0.404	1.36E-04	0.084	0.742	102.03	2.39	3.79	C	2.76	24.79	233.8	6931	0.181	2.03E-04	0.091	0.748	102.03	5.11	3.74	C	1.89	14.89
325.3	6784	0.439	1.67E-04	0.084	0.741	102.03	2.21	3.79	C	2.79	20.34	241.4	6916	0.281	2.64E-04	0.091	0.747	102.03	3.39	3.74	C	1.74	21.49
323.4	6758	0.479	1.99E-04	0.083	0.740	102.03	2.03	3.80	C	2.67	16.35	213.6	6805	0.331	4.68E-05	0.087	0.744	102.03	2.90	3.77	C	2.21	121.40
321.7	6703	0.584	2.72E-04	0.081	0.738	102.03	1.67	3.81	C	2.47													

319.3	6838	0.515	3.26E-04	0.083	0.740	102.03	1.89	3.80	C	2.18	14.79	263.6	7980	0.312	9.01E-05	0.087	0.744	102.03	3.07	3.77	C	2.24	27.43
73.0	6887	-0.006	6.34E-05	0.091	0.745	102.03	121.15	3.76	C	2.79	59.56	312.0	7933	0.365	1.46E-04	0.086	0.743	102.03	2.64	3.78	C	2.43	19.67
134.6	6959	0.025	7.75E-05	0.091	0.747	102.03	25.61	3.74	C	1.92	22.69	333.8	7909	0.402	1.81E-04	0.085	0.742	102.03	2.41	3.78	C	2.48	16.17
152.5	6957	0.043	8.73E-05	0.090	0.747	102.03	17.47	3.74	C	1.93	21.51	333.5	7870	0.447	2.19E-04	0.084	0.741	102.03	2.17	3.79	C	2.36	12.89
166.8	6952	0.063	9.87E-05	0.090	0.747	102.03	12.89	3.75	C	1.91	19.46	336.8	7788	0.565	3.07E-04	0.081	0.739	102.03	1.73	3.81	C	2.19	14.61
185.8	6944	0.113	1.27E-04	0.090	0.747	102.03	7.88	3.75	C	1.82	16.19	71.5	8044	-0.012	7.80E-05	0.094	0.746	102.03	336.45	3.75	C	2.41	55.77
192.3	6936	0.174	1.62E-04	0.090	0.746	102.03	5.31	3.75	C	1.67	24.59	165.0	8213	0.027	9.99E-05	0.094	0.750	102.03	23.94	3.72	C	1.92	21.11
206.9	6873	0.211	7.39E-05	0.087	0.744	102.03	4.45	3.76	C	2.07	68.44	193.3	8210	0.051	1.15E-04	0.094	0.750	102.03	15.26	3.72	C	1.96	19.93
237.1	6851	0.248	1.11E-04	0.087	0.744	102.03	3.82	3.77	C	2.19	23.34	214.1	8201	0.078	1.33E-04	0.094	0.750	102.03	10.77	3.72	C	1.95	18.04
281.1	6827	0.309	1.69E-04	0.086	0.743	102.03	3.10	3.78	C	2.34	17.75	238.4	8182	0.146	1.79E-04	0.093	0.749	102.03	6.20	3.73	C	1.83	14.37
305.0	6814	0.351	2.05E-04	0.085	0.743	102.03	2.74	3.78	C	2.41	15.02	243.0	8164	0.235	2.35E-04	0.093	0.749	102.03	4.01	3.73	C	1.64	20.73
313.7	6791	0.401	2.44E-04	0.085	0.742	102.03	2.41	3.78	C	2.35	12.49	214.4	8016	0.283	5.41E-05	0.088	0.745	102.03	3.36	3.76	C	1.94	88.21
333.6	6741	0.529	3.37E-04	0.083	0.740	102.03	1.84	3.80	C	2.27	14.84	259.8	7975	0.313	9.06E-05	0.087	0.744	102.03	3.06	3.77	C	2.21	27.13
71.0	6979	-0.007	6.26E-05	0.091	0.745	102.03	128.41	3.76	C	2.68	59.06	310.9	7928	0.367	1.47E-04	0.086	0.743	102.03	2.63	3.78	C	2.42	19.42
133.2	7058	0.024	7.59E-05	0.091	0.747	102.03	26.28	3.74	C	1.91	22.74	335.3	7905	0.404	1.82E-04	0.085	0.742	102.03	2.40	3.78	C	2.49	15.99
151.1	7056	0.042	8.54E-05	0.091	0.747	102.03	17.90	3.74	C	1.91	21.58	337.0	7865	0.449	2.20E-04	0.084	0.741	102.03	2.16	3.79	C	2.39	12.84
165.5	7051	0.061	9.66E-05	0.091	0.747	102.03	13.20	3.74	C	1.90	19.50	344.4	7782	0.568	3.10E-04	0.081	0.739	102.03	1.72	3.81	C	2.23	14.72
185.0	7043	0.110	1.25E-04	0.090	0.747	102.03	8.06	3.75	C	1.81	16.14	72.2	7998	-0.012	7.85E-05	0.094	0.746	102.03	308.14	3.75	C	2.44	55.99
192.0	7034	0.170	1.60E-04	0.090	0.747	102.03	5.41	3.75	C	1.66	24.62	165.6	8162	0.027	1.01E-04	0.094	0.750	102.03	23.59	3.72	C	1.92	20.99
203.6	6969	0.207	7.21E-05	0.088	0.745	102.03	4.53	3.76	C	2.03	68.56	194.1	8159	0.051	1.17E-04	0.094	0.750	102.03	15.06	3.72	C	1.96	19.78
233.2	6947	0.243	1.09E-04	0.087	0.744	102.03	3.90	3.77	C	2.15	23.11	215.1	8150	0.079	1.35E-04	0.094	0.750	102.03	10.64	3.72	C	1.95	17.91
275.7	6923	0.303	1.65E-04	0.086	0.743	102.03	3.16	3.77	C	2.29	17.50	239.4	8132	0.148	1.81E-04	0.093	0.749	102.03	6.13	3.73	C	1.84	14.28
298.7	6910	0.344	2.00E-04	0.086	0.743	102.03	2.80	3.78	C	2.35	14.76	244.0	8114	0.237	2.37E-04	0.093	0.749	102.03	3.97	3.73	C	1.65	20.59
306.4	6886	0.393	2.39E-04	0.085	0.742	102.03	2.46	3.78	C	2.29	12.30	220.1	7967	0.286	5.51E-05	0.088	0.745	102.03	3.33	3.76	C	1.99	87.04
324.6	6834	0.518	3.28E-04	0.083	0.741	102.03	1.88	3.80	C	2.21	14.64	268.1	7927	0.317	9.24E-05	0.087	0.744	102.03	3.03	3.77	C	2.28	27.37
82.3	6794	-0.004	6.48E-05	0.090	0.746	102.03	94.40	3.76	C	3.19	60.77	319.8	7881	0.371	1.50E-04	0.086	0.743	102.03	2.60	3.78	C	2.49	19.68
136.0	6835	0.028	7.94E-05	0.090	0.747	102.03	23.77	3.75	C	1.92	23.08	343.8	7858	0.409	1.86E-04	0.085	0.742	102.03	2.37	3.78	C	2.55	16.22
153.7	6833	0.046	8.93E-05	0.090	0.747	102.03	16.47	3.75	C	1.93	21.90	344.6	7819	0.455	2.25E-04	0.084	0.741	102.03	2.13	3.79	C	2.44	13.01
167.6	6829	0.067	1.01E-04	0.090	0.747	102.03	12.27	3.75	C	1.92	20.00	350.4	7738	0.576	3.16E-04	0.081	0.739	102.03	1.70	3.81	C	2.27	14.72
185.5	6820	0.118	1.29E-04	0.090	0.746	102.03	7.59	3.75	C	1.82	16.61	73.2	8001	-0.012	7.88E-05	0.094	0.746	102.03	298.13	3.75	C	2.47	56.24
191.0	6812	0.180	1.63E-04	0.089	0.746	102.03	5.15	3.75	C	1.67	25.21	167.6	8164	0.028	1.01E-04	0.094	0.750	102.03	23.47	3.72	C	1.94	21.25
207.7	6751	0.217	7.52E-05	0.087	0.744	102.03	4.34	3.77	C	2.10	70.12	196.3	8161	0.052	1.17E-04	0.094	0.750	102.03	15.01	3.72	C	1.98	20.02
239.3	6729	0.255	1.14E-04	0.087	0.744	102.03	3.73	3.77	C	2.23	23.66	217.1	8152	0.079	1.35E-04	0.094	0.750	102.03	10.60	3.72	C	1.97	18.15
285.1	6706	0.318	1.74E-04	0.086	0.743	102.03	3.02	3.78	C	2.39	17.96	241.3	8134	0.149	1.81E-04	0.093	0.749	102.03	6.11	3.73	C	1.85	14.46
310.0	6693	0.361	2.11E-04	0.085	0.743	102.03	2.67	3.78	C	2.46	15.18	245.8	8116	0.238	2.37E-04	0.093	0.749	102.03	3.96	3.73	C	1.66	20.83
319.2	6670	0.412	2.52E-04	0.084	0.742	102.03	2.35	3.79	C	2.40	12.65	220.0	7967	0.287	5.50E-05	0.088	0.745	102.03	3.32	3.76	C	1.99	87.89
340.4	6621	0.544	3.47E-04	0.083	0.740	102.03	1.79	3.80	C	2.33	15.13	273.1	7926	0.318	9.27E-05	0.087	0.744	102.03	3.02	3.77	C	2.32	28.18
73.4	6905	-0.006	6.34E-05	0.091	0.745	102.03	115.20	3.76	C	2.80	58.62	325.7	7880	0.372	1.51E-04	0.086	0.743	102.03	2.59	3.78	C	2.53	20.23
133.2	6972	0.025	7.74E-05	0.091	0.747	102.03	25.35	3.74	C	1.90	22.49	348.8	7857	0.410	1.87E-04	0.085	0.742	102.03	2.36	3.78	C	2.58	16.61
151.2	6969	0.043	8.72E-05	0.091	0.747	102.03	17.35	3.74	C	1.91	21.36	347.0	7818	0.457	2.26E-04	0.084	0.741	102.03	2.13	3.79	C	2.45	13.20
165.8	6965	0.064	9.87E-05	0.090	0.747	102.03	12.82	3.74	C	1.90	19.41	347.9	7735	0.578	3.18E-04	0.081	0.739	102.03	1.69	3.81	C	2.25	14.86
184.8	6956	0.113	1.27E-04	0.090	0.747	102.03	7.85	3.75	C	1.81	16.11	74.8	7987	-0.011	7.89E-05	0.094	0.746	102.03	238.26	3.75	C	2.53	56.59
190.9	6948	0.175	1.63E-04	0.090	0.747	102.03	5.29	3.75	C	1.66	24.24	166.8	8137	0.029	1.02E-04	0.094	0.750	102.03	22.94	3.72	C	1.92	21.22
200.8	6883	0.212	7.37E-05	0.088	0.745	102.03	4.43	3.76	C	2.01	68.91	195.4	8133	0.053	1.18E-04	0.094	0.750	102.03	14.75	3.72	C	1.97	19.99
233.0	6861	0.249	1.11E-04	0.087	0.744	102.03	3.81	3.77	C	2.15	23.17	216.0	8125	0.081	1.36E-04	0.094	0.750	102.03	10.46	3.72	C	1.96	18.14
277.7	6837	0.310	1.69E-04	0.086	0.743	102.03	3.09	3.78	C	2.31	17.64	239.6	8106	0.150	1.82E-04	0.093	0.749	102.03	6.05	3.73	C	1.83	14.44
301.5	6825	0.352	2.05E-04	0.086	0.743	102.03	2.74	3.78	C	2.38	14.92	243.6	8088	0.240	2.38E-04	0.093	0.749	102.03	3.93	3.73	C	1.64	20.82
309.2	6800	0.402	2.45E-04	0.085	0.742	102.03	2.41	3.78	C	2.32	12.34	211.5	7940	0.289	5.50E-05	0.088	0.745	102.03	3.30	3.76	C	1.92	91.11
326.9	6749	0.531	3.37E-04	0.083	0.740	102.03	1.84	3.80	C	2.23	14.79	264.6	7899	0.320	9.37E-05	0.087	0.744	102.03	3.00	3.77	C	2.25	27.36
70.1	7001	-0.007	6.27E-05	0.091	0.745	102.03	132.30	3.76	C	2.64	58.04	317.9	7853	0.375	1.53E-04	0.085	0.743	102.03	2.57	3.78	C	2.47	19.59
133.6	7084	0.023	7.60E-05	0.091	0.748	102.03	26.42	3.74	C	1.91	22.50	341.8	7829	0.414	1.89E-04	0.085	0.742	102.03	2.34	3.78	C	2.53	16.06
151.8	7082	0.041	8.56E-05	0.091	0.748	102.03	17.95	3.74	C	1.92	21.36	341.9	7790	0.461	2.28E-04	0.084	0.741	102.03	2.11	3.79	C	2.42	12.86
166.6	7077	0.061	9.69E-05	0.091	0.747	102.03	13.21	3.74	C	1.91	19.30	345.9	7707	0.583	3.20E-0								

216.7	8171	0.079	1.35E-04	0.094	0.750	102.03	10.63	3.72	C	1.97	18.18	351.2	7796	0.543	3.82E-04	0.083	0.740	102.03	1.80	3.80	C	2.05	11.75
240.7	8153	0.148	1.81E-04	0.093	0.750	102.03	6.13	3.73	C	1.84	14.49	62.9	7964	-0.012	5.94E-05	0.092	0.744	102.03	367.34	3.77	C	2.13	55.14
245.0	8135	0.238	2.37E-04	0.093	0.749	102.03	3.96	3.73	C	1.65	20.86	141.5	8131	0.016	6.96E-05	0.092	0.748	102.03	32.27	3.73	C	1.99	22.87
220.2	7988	0.287	5.57E-05	0.088	0.745	102.03	3.33	3.76	C	1.99	85.81	159.1	8128	0.033	7.77E-05	0.092	0.748	102.03	21.15	3.73	C	1.94	22.00
266.2	7946	0.317	9.28E-05	0.087	0.744	102.03	3.02	3.77	C	2.26	27.19	172.7	8122	0.051	8.77E-05	0.092	0.748	102.03	15.27	3.74	C	1.90	19.86
316.3	7900	0.372	1.50E-04	0.086	0.743	102.03	2.59	3.78	C	2.46	19.55	190.1	8111	0.095	1.14E-04	0.091	0.748	102.03	9.13	3.74	C	1.76	16.22
339.5	7876	0.410	1.86E-04	0.085	0.742	102.03	2.36	3.78	C	2.51	16.08	195.3	8099	0.151	1.47E-04	0.091	0.748	102.03	6.05	3.74	C	1.59	24.91
340.3	7837	0.456	2.26E-04	0.084	0.741	102.03	2.13	3.79	C	2.40	12.88	229.0	8014	0.188	8.27E-05	0.089	0.745	102.03	4.96	3.76	C	2.04	50.02
345.8	7755	0.578	3.17E-04	0.081	0.739	102.03	1.69	3.81	C	2.23	14.60	255.1	7984	0.228	1.17E-04	0.088	0.745	102.03	4.14	3.76	C	2.10	20.17
58.9	7978	-0.014	6.03E-05	0.092	0.743	102.03	5053.78	3.78	C	1.99	52.27	302.0	7950	0.293	1.79E-04	0.087	0.744	102.03	3.27	3.77	C	2.22	15.54
140.4	8183	0.014	6.89E-05	0.092	0.749	102.03	35.13	3.73	C	2.02	22.86	328.1	7933	0.337	2.19E-04	0.086	0.743	102.03	2.85	3.77	C	2.27	13.14
156.9	8180	0.030	7.65E-05	0.092	0.748	102.03	22.45	3.73	C	1.95	22.24	332.8	7896	0.391	2.65E-04	0.085	0.742	102.03	2.47	3.78	C	2.17	10.70
169.9	8174	0.048	8.63E-05	0.092	0.748	102.03	16.01	3.74	C	1.89	20.09	346.6	7818	0.533	3.75E-04	0.083	0.740	102.03	1.83	3.80	C	2.03	11.63
188.0	8163	0.092	1.13E-04	0.092	0.748	102.03	9.43	3.74	C	1.75	16.31	63.3	7930	-0.012	5.96E-05	0.092	0.744	102.03	335.72	3.77	C	2.15	55.30
195.2	8151	0.147	1.47E-04	0.091	0.748	102.03	6.19	3.74	C	1.58	25.01	141.0	8093	0.017	7.03E-05	0.092	0.748	102.03	31.79	3.73	C	1.97	22.83
225.8	8068	0.183	7.86E-05	0.089	0.746	102.03	5.07	3.76	C	2.02	50.10	158.6	8090	0.033	7.87E-05	0.092	0.748	102.03	20.86	3.73	C	1.93	21.92
253.9	8038	0.222	1.12E-04	0.088	0.745	102.03	4.25	3.76	C	2.10	20.31	172.3	8084	0.052	8.89E-05	0.092	0.748	102.03	15.07	3.74	C	1.89	19.81
300.3	8005	0.284	1.71E-04	0.087	0.744	102.03	3.36	3.77	C	2.23	15.60	190.2	8073	0.097	1.15E-04	0.091	0.748	102.03	9.00	3.74	C	1.76	16.18
325.4	7988	0.327	2.10E-04	0.086	0.743	102.03	2.94	3.77	C	2.27	13.22	196.1	8061	0.153	1.49E-04	0.091	0.748	102.03	5.97	3.74	C	1.59	24.73
329.3	7952	0.378	2.53E-04	0.085	0.742	102.03	2.55	3.78	C	2.17	10.80	230.9	7975	0.190	8.35E-05	0.088	0.745	102.03	4.89	3.76	C	2.06	50.31
341.1	7875	0.514	3.57E-04	0.083	0.740	102.03	1.90	3.80	C	2.03	11.57	257.1	7944	0.231	1.18E-04	0.088	0.745	102.03	4.09	3.76	C	2.12	20.53
71.9	8068	-0.012	7.83E-05	0.095	0.746	102.03	360.37	3.75	C	2.41	54.92	302.5	7909	0.297	1.81E-04	0.086	0.744	102.03	3.22	3.77	C	2.23	15.68
167.5	8242	0.027	1.00E-04	0.095	0.751	102.03	23.98	3.72	C	1.94	21.03	327.1	7891	0.342	2.22E-04	0.086	0.743	102.03	2.81	3.78	C	2.26	13.19
196.2	8238	0.051	1.16E-04	0.095	0.751	102.03	15.26	3.72	C	1.98	19.89	330.9	7854	0.397	2.69E-04	0.085	0.742	102.03	2.44	3.78	C	2.16	10.68
217.3	8230	0.078	1.34E-04	0.094	0.750	102.03	10.76	3.72	C	1.97	17.97	342.4	7775	0.541	3.81E-04	0.082	0.740	102.03	1.81	3.80	C	2.00	11.66
242.0	8211	0.147	1.80E-04	0.094	0.750	102.03	6.18	3.72	C	1.85	14.31	64.6	7968	-0.011	5.96E-05	0.092	0.745	102.03	285.45	3.76	C	2.19	53.99
247.0	8193	0.236	2.37E-04	0.093	0.749	102.03	3.99	3.73	C	1.66	20.49	141.4	8125	0.017	7.02E-05	0.092	0.749	102.03	31.32	3.73	C	1.97	22.55
216.3	8043	0.285	5.45E-05	0.089	0.745	102.03	3.35	3.76	C	1.95	87.17	159.2	8122	0.034	7.86E-05	0.092	0.749	102.03	20.67	3.73	C	1.93	21.75
263.7	8002	0.315	9.12E-05	0.087	0.744	102.03	3.04	3.77	C	2.23	27.46	173.3	8117	0.052	8.88E-05	0.092	0.748	102.03	14.98	3.73	C	1.89	19.63
315.7	7956	0.369	1.48E-04	0.086	0.743	102.03	2.62	3.78	C	2.45	19.70	191.8	8105	0.097	1.16E-04	0.092	0.748	102.03	8.97	3.74	C	1.77	16.09
340.0	7932	0.406	1.83E-04	0.085	0.743	102.03	2.38	3.78	C	2.51	16.25	198.0	8095	0.154	1.49E-04	0.091	0.748	102.03	5.95	3.74	C	1.60	24.28
340.5	7892	0.452	2.22E-04	0.084	0.741	102.03	2.15	3.79	C	2.40	12.99	233.9	8008	0.191	8.37E-05	0.089	0.746	102.03	4.88	3.76	C	2.08	48.42
345.9	7808	0.572	3.13E-04	0.082	0.739	102.03	1.71	3.81	C	2.23	14.77	258.5	7977	0.231	1.18E-04	0.088	0.745	102.03	4.08	3.76	C	2.13	20.20
60.6	7953	-0.013	6.03E-05	0.092	0.744	102.03	757.35	3.77	C	2.05	54.76	305.1	7943	0.297	1.80E-04	0.087	0.744	102.03	3.22	3.77	C	2.24	15.52
142.2	8141	0.015	7.02E-05	0.092	0.749	102.03	33.43	3.73	C	2.01	22.92	331.1	7925	0.342	2.21E-04	0.086	0.743	102.03	2.82	3.77	C	2.29	13.11
159.7	8138	0.032	7.82E-05	0.092	0.748	102.03	21.58	3.73	C	1.96	22.16	335.8	7888	0.396	2.67E-04	0.085	0.742	102.03	2.44	3.78	C	2.19	10.68
173.3	8133	0.050	8.82E-05	0.092	0.748	102.03	15.48	3.74	C	1.90	19.95	349.6	7810	0.540	3.80E-04	0.083	0.740	102.03	1.81	3.80	C	2.04	11.45
190.8	8121	0.094	1.14E-04	0.092	0.748	102.03	9.18	3.74	C	1.77	16.33												
196.2	8110	0.150	1.48E-04	0.091	0.748	102.03	6.07	3.74	C	1.59	25.20												
233.1	8026	0.187	8.12E-05	0.089	0.745	102.03	4.98	3.76	C	2.08	49.55												
256.7	7996	0.226	1.15E-04	0.088	0.745	102.03	4.16	3.76	C	2.12	20.57												
301.0	7962	0.290	1.75E-04	0.087	0.744	102.03	3.29	3.77	C	2.23	15.77												
325.8	7945	0.333	2.14E-04	0.086	0.743	102.03	2.88	3.77	C	2.27	13.35												
329.8	7909	0.386	2.58E-04	0.085	0.742	102.03	2.50	3.78	C	2.17	10.85												
342.4	7832	0.525	3.66E-04	0.083	0.740	102.03	1.86	3.80	C	2.02	11.71												
60.1	8012	-0.014	6.04E-05	0.093	0.744	102.03	1258.30	3.77	C	2.02	53.55												
141.6	8211	0.015	6.98E-05	0.093	0.749	102.03	34.11	3.73	C	2.01	22.95												
158.1	8207	0.031	7.77E-05	0.093	0.749	102.03	21.91	3.73	C	1.94	22.23												
171.3	8202	0.049	8.77E-05	0.093	0.749	102.03	15.67	3.73	C	1.88	20.05												
189.6	8190	0.093	1.14E-04	0.092	0.749	102.03	9.25	3.73	C	1.75	16.31												
197.1	8178	0.150	1.49E-04	0.092	0.748	102.03	6.09	3.74	C	1.59	25.10												
227.4	8094	0.187	8.20E-05	0.089	0.746	102.03	4.98	3.75	C	2.02	48.76												
254.2	8063	0.226	1.16E-04	0.088	0.745	102.03	4.16	3.76	C	2.09	20.14												
300.2	8029	0.291	1.77E-04	0.087	0.744	102.03	3.28	3.77	C	2.20	15.45												
325.2	8011	0.335	2.17E-04	0.087	0.744	102.03	2.87	3.77	C	2.25	13.06												
329.0	7974	0.389	2.63E-04	0.086	0.743	102.03	2.49	3.78	C	2.14	10.62												
340.8	7894	0.530	3.72E-04	0.083	0.741	102.03	1.84	3.79	C	1.99	11.47												
62.2	7947	-0.013	6.08E-05	0.093	0.744	102.03	488.61	3.77	C	2.11	54.64												
141.8	8124	0.016	7.09E-05	0.092	0.749	102.03	32.37	3.73	C														

APPENDIX B1

Convective Boiling of R32/134a within a micro-fin tube

(file: taemix.tbl)

Nu	Re	x_1	Bo	P/P_c	T/T_c	M_c	Sv	Pr	flow	E_s	U_{bu}	160.3	8048	0.248	1.71E-04	0.110	0.755	79.19	3.78	2.92	C	1.27	9.04
64.2	8508	0.027	5.58E-05	0.116	0.755	79.19	22.86	2.81	C	0.94	28.45	185.9	8011	0.335	2.22E-04	0.110	0.757	79.19	2.85	2.95	C	1.31	7.77
70.4	8495	0.051	5.68E-05	0.116	0.756	79.19	14.78	2.82	C	0.93	20.71	199.4	7991	0.388	2.51E-04	0.109	0.757	79.19	2.47	2.97	C	1.33	7.61
76.4	8488	0.064	6.06E-05	0.116	0.756	79.19	12.44	2.82	C	0.96	14.60	209.7	7961	0.448	2.84E-04	0.109	0.758	79.19	2.15	2.99	C	1.33	7.87
84.1	8481	0.078	6.65E-05	0.116	0.756	79.19	10.64	2.83	C	1.00	12.47	230.6	7900	0.594	3.57E-04	0.107	0.759	79.19	1.64	3.05	C	1.32	9.09
104.4	8466	0.110	8.48E-05	0.116	0.757	79.19	7.91	2.84	C	1.10	12.32	66.9	8241	0.028	5.67E-05	0.113	0.753	79.19	22.86	2.82	C	0.99	29.09
128.9	8448	0.151	1.11E-04	0.115	0.757	79.19	5.97	2.86	C	1.20	11.76	73.0	8229	0.052	5.73E-05	0.113	0.753	79.19	14.71	2.83	C	0.98	21.31
135.1	8401	0.186	1.32E-04	0.114	0.757	79.19	4.95	2.87	C	1.17	10.34	79.0	8222	0.065	6.09E-05	0.113	0.753	79.19	12.38	2.83	C	1.00	15.06
156.7	8369	0.245	1.70E-04	0.113	0.758	79.19	3.82	2.90	C	1.21	8.84	86.8	8216	0.079	6.66E-05	0.112	0.754	79.19	10.59	2.84	C	1.04	12.86
182.0	8330	0.331	2.21E-04	0.113	0.759	79.19	2.88	2.93	C	1.25	7.58	107.4	8200	0.111	8.46E-05	0.112	0.754	79.19	7.89	2.85	C	1.15	12.71
195.3	8309	0.384	2.51E-04	0.113	0.760	79.19	2.50	2.95	C	1.27	7.43	132.4	8183	0.152	1.11E-04	0.112	0.755	79.19	5.96	2.87	C	1.26	12.13
205.7	8279	0.444	2.83E-04	0.112	0.760	79.19	2.17	2.98	C	1.27	7.72	137.8	8136	0.186	1.32E-04	0.111	0.755	79.19	4.95	2.89	C	1.21	10.59
226.8	8216	0.589	3.56E-04	0.111	0.762	79.19	1.65	3.03	C	1.26	8.99	159.9	8105	0.245	1.69E-04	0.110	0.755	79.19	3.83	2.91	C	1.26	9.08
66.3	8173	0.028	5.70E-05	0.113	0.753	79.19	22.92	2.82	C	0.98	29.36	185.9	8068	0.331	2.19E-04	0.110	0.756	79.19	2.88	2.95	C	1.31	7.80
73.1	8160	0.052	5.80E-05	0.112	0.753	79.19	14.69	2.83	C	0.98	21.39	199.8	8048	0.384	2.49E-04	0.109	0.757	79.19	2.50	2.97	C	1.33	7.64
79.4	8154	0.065	6.18E-05	0.112	0.753	79.19	12.33	2.84	C	1.01	15.06	210.3	8018	0.443	2.81E-04	0.109	0.758	79.19	2.18	2.99	C	1.33	7.91
87.4	8147	0.079	6.77E-05	0.112	0.754	79.19	10.53	2.84	C	1.05	12.90	232.0	7957	0.588	3.54E-04	0.107	0.759	79.19	1.66	3.04	C	1.33	9.15
108.2	8131	0.112	8.60E-05	0.112	0.754	79.19	7.82	2.86	C	1.16	12.76	66.4	8257	0.028	5.62E-05	0.113	0.753	79.19	23.00	2.82	C	0.98	29.28
133.3	8113	0.154	1.12E-04	0.112	0.755	79.19	5.90	2.87	C	1.27	12.19	72.6	8244	0.052	5.70E-05	0.113	0.753	79.19	14.80	2.83	C	0.97	21.40
139.0	8068	0.189	1.34E-04	0.111	0.754	79.19	4.89	2.89	C	1.23	10.66	78.7	8238	0.064	6.06E-05	0.113	0.754	79.19	12.45	2.83	C	1.00	15.02
161.0	8037	0.248	1.71E-04	0.110	0.755	79.19	3.78	2.92	C	1.27	9.14	86.5	8231	0.078	6.63E-05	0.113	0.754	79.19	10.65	2.84	C	1.04	12.83
186.8	8000	0.335	2.22E-04	0.109	0.756	79.19	2.85	2.95	C	1.32	7.85	107.1	8216	0.110	8.43E-05	0.112	0.754	79.19	7.93	2.85	C	1.15	12.67
200.5	7980	0.388	2.52E-04	0.109	0.757	79.19	2.47	2.97	C	1.34	7.70	131.9	8199	0.151	1.10E-04	0.112	0.755	79.19	5.99	2.87	C	1.25	12.06
210.7	7951	0.448	2.84E-04	0.108	0.758	79.19	2.15	2.99	C	1.34	7.96	137.4	8153	0.185	1.31E-04	0.111	0.755	79.19	4.97	2.89	C	1.21	10.54
231.6	7889	0.594	3.57E-04	0.107	0.759	79.19	1.64	3.05	C	1.33	9.22	159.3	8122	0.244	1.68E-04	0.110	0.755	79.19	3.85	2.91	C	1.26	9.04
66.5	8263	0.027	5.63E-05	0.113	0.753	79.19	23.21	2.82	C	0.99	29.30	184.9	8085	0.329	2.18E-04	0.110	0.757	79.19	2.90	2.95	C	1.30	7.75
72.8	8250	0.051	5.71E-05	0.113	0.753	79.19	14.88	2.83	C	0.98	21.41	198.4	8065	0.382	2.48E-04	0.109	0.757	79.19	2.52	2.97	C	1.32	7.60
78.9	8244	0.064	6.07E-05	0.113	0.754	79.19	12.51	2.83	C	1.00	15.07	208.7	8035	0.441	2.79E-04	0.109	0.758	79.19	2.19	2.99	C	1.32	7.86
86.8	8237	0.078	6.64E-05	0.112	0.754	79.19	10.69	2.84	C	1.04	12.85	229.7	7974	0.584	3.52E-04	0.107	0.759	79.19	1.67	3.04	C	1.31	9.06
107.4	8221	0.110	8.44E-05	0.112	0.754	79.19	7.95	2.85	C	1.15	12.69	66.5	8178	0.029	5.74E-05	0.113	0.753	79.19	22.35	2.82	C	0.98	28.81
132.3	8204	0.151	1.11E-04	0.112	0.755	79.19	6.00	2.87	C	1.26	12.11	72.6	8165	0.053	5.78E-05	0.113	0.753	79.19	14.44	2.83	C	0.97	21.18
138.0	8159	0.185	1.31E-04	0.111	0.755	79.19	4.98	2.89	C	1.22	10.59	78.6	8159	0.066	6.14E-05	0.112	0.753	79.19	12.17	2.84	C	1.00	15.00
160.0	8128	0.244	1.68E-04	0.110	0.755	79.19	3.85	2.91	C	1.26	9.08	86.4	8152	0.080	6.70E-05	0.112	0.754	79.19	10.43	2.84	C	1.04	12.84
185.7	8090	0.329	2.19E-04	0.110	0.757	79.19	2.90	2.95	C	1.31	7.80	107.0	8136	0.113	8.50E-05	0.112	0.754	79.19	7.79	2.85	C	1.15	12.69
199.4	8070	0.382	2.48E-04	0.109	0.757	79.19	2.52	2.97	C	1.33	7.63	132.1	8119	0.154	1.11E-04	0.112	0.755	79.19	5.89	2.87	C	1.26	12.15
209.7	8040	0.441	2.80E-04	0.109	0.758	79.19	2.19	2.99	C	1.33	7.90	136.9	8072	0.188	1.32E-04	0.111	0.754	79.19	4.90	2.89	C	1.21	10.55
230.8	7979	0.585	3.52E-04	0.107	0.759	79.19	1.66	3.04	C	1.32	9.11	158.8	8040	0.248	1.70E-04	0.110	0.755	79.19	3.79	2.92	C	1.26	9.03
66.2	8234	0.028	5.65E-05	0.113	0.753	79.19	22.97	2.82	C	0.98	29.22	184.4	8003	0.334	2.21E-04	0.109	0.756	79.19	2.86	2.95	C	1.30	7.75
72.5	8222	0.052	5.73E-05	0.113	0.753	79.19	14.77	2.83	C	0.97	21.36	198.0	7983	0.387	2.51E-04	0.109	0.757	79.19	2.48	2.97	C	1.32	7.58
78.6	8215	0.065	6.09E-05	0.113	0.753	79.19	12.42	2.83	C	1.00	15.06	208.4	7953	0.447	2.83E-04	0.108	0.758	79.19	2.16	2.99	C	1.32	7.85
86.4	8208	0.078	6.66E-05	0.112	0.754	79.19	10.62	2.84	C	1.04	12.85	229.7	7892	0.593	3.58E-04	0.107	0.759	79.19	1.64	3.05	C	1.31	9.07
107.0	8193	0.111	8.46E-05	0.112	0.754	79.19	7.90	2.85	C	1.15	12.70	64.2	8602	0.026	5.49E-05	0.116	0.755	79.19	23.59	2.80	C	0.94	28.45
131.9	8175	0.152	1.11E-04	0.112	0.755	79.19	5.97	2.87	C	1.25	12.12	70.2	8589	0.050	5.58E-05	0.116	0.756	79.19	15.17	2.81	C	0.93	20.72
137.4	8129	0.186	1.32E-04	0.111	0.755	79.19	4.95	2.89	C	1.21	10.58	76.1	8583	0.062	5.95E-05	0.116	0.756	79.19	12.76	2.82	C	0.96	14.62
159.3	8098	0.245	1.69E-04	0.110	0.755	79.19	3.83	2.91	C	1.26	9.07	83.7	8576	0.075	6.52E-05	0.116	0.756	79.19	10.90	2.83	C	1.00	12.49
185.1	8061	0.330	2.19E-04	0.110	0.756	79.19	2.89	2.95	C	1.31	7.80	103.8	8560	0.107	8.33E-05	0.116	0.757	79.19	8.10	2.84	C	1.10	12.34
198.7	8041	0.383	2.49E-04	0.109	0.757	79.19	2.51	2.97	C	1.33	7.64	128.2	8542	0.147	1.09E-04	0.115	0.757	79.19	6.10	2.85	C	1.20	11.77
209.0	8011	0.443	2.81E-04	0.109	0.758	79.19	2.18	2.99	C	1.32	7.91	134.1	8495	0.181	1.30E-04	0.114	0.757	79.19	5.06	2.87	C	1.16	10.30
230.0	7949	0.587	3.54E-04	0.107	0.759	79.19	1.66	3.04	C	1.32	9.13	155.6	8463	0.240	1.67E-04	0.114	0.758	79.19	3.90	2.90	C	1.20	8.83
66.8	7864	0.033	6.12E-05	0.112	0.752	79.19	20.73	2.82	C	0.97	28.70	180.7	8424	0.324	2.17E-04	0.113	0.759	79.19	2.94	2.93	C	1.24	7.58
73.2	7851	0.059	6.18E-05	0.112	0.753	79.19	13.44	2.84	C	0.97	21.02	193.9	8404	0.376	2.46E-04	0.113	0.760	79.19	2.55	2.95	C	1.26	7.42
79.4	7844	0.072	6.56E-05	0.112	0.753	79.19	11.33	2.84	C	1.00	14.83	204.1	8373	0.435	2.78E-04	0.112	0.760	79.19	2.21	2.97	C	1.26	7.70
87.3	7837	0.087	7.17E-05	0.111	0.753	79.19	9.71	2.85	C	1.05	12.69	224.9	8309	0.578	3.								

86.8	8203	0.078	6.67E-05	0.113	0.754	79.19	10.60	2.84	C	1.05	12.94	228.0	8324	0.579	3.51E-04	0.111	0.762	79.19	1.68	3.02	C	1.27	9.11
107.6	8188	0.111	8.47E-05	0.112	0.754	79.19	7.89	2.85	C	1.15	12.79	64.8	8639	0.026	5.47E-05	0.117	0.756	79.19	23.78	2.80	C	0.95	28.49
132.6	8171	0.152	1.11E-04	0.112	0.755	79.19	5.96	2.87	C	1.26	12.21	70.7	8627	0.049	5.56E-05	0.117	0.756	79.19	15.27	2.81	C	0.94	20.78
137.7	8124	0.186	1.32E-04	0.111	0.755	79.19	4.95	2.89	C	1.22	10.63	76.6	8620	0.061	5.93E-05	0.116	0.756	79.19	12.83	2.82	C	0.96	14.72
159.5	8093	0.245	1.69E-04	0.110	0.755	79.19	3.83	2.91	C	1.26	9.11	84.3	8613	0.075	6.50E-05	0.116	0.756	79.19	10.96	2.82	C	1.00	12.61
185.0	8056	0.331	2.19E-04	0.110	0.757	79.19	2.89	2.95	C	1.31	7.83	104.5	8598	0.106	8.30E-05	0.116	0.757	79.19	8.14	2.84	C	1.10	12.43
198.5	8036	0.383	2.49E-04	0.109	0.757	79.19	2.50	2.97	C	1.33	7.66	129.0	8580	0.147	1.09E-04	0.116	0.758	79.19	6.13	2.85	C	1.20	11.85
208.6	8006	0.443	2.80E-04	0.109	0.758	79.19	2.18	2.99	C	1.32	7.93	135.2	8534	0.181	1.30E-04	0.115	0.757	79.19	5.08	2.87	C	1.17	10.39
229.5	7945	0.587	3.53E-04	0.107	0.759	79.19	1.66	3.04	C	1.31	9.17	156.9	8502	0.239	1.67E-04	0.114	0.758	79.19	3.92	2.89	C	1.21	8.90
65.8	8269	0.028	5.60E-05	0.113	0.753	79.19	23.03	2.82	C	0.97	28.98	182.3	8463	0.323	2.17E-04	0.113	0.759	79.19	2.94	2.93	C	1.25	7.63
72.2	8257	0.052	5.68E-05	0.113	0.753	79.19	14.83	2.83	C	0.97	21.19	195.7	8442	0.375	2.46E-04	0.113	0.760	79.19	2.55	2.95	C	1.27	7.49
78.3	8251	0.064	6.04E-05	0.113	0.754	79.19	12.48	2.83	C	1.00	14.92	206.0	8411	0.434	2.78E-04	0.113	0.761	79.19	2.22	2.97	C	1.27	7.76
86.2	8243	0.078	6.61E-05	0.113	0.754	79.19	10.67	2.84	C	1.04	12.72	227.3	8347	0.577	3.50E-04	0.111	0.762	79.19	1.69	3.02	C	1.26	9.05
106.7	8228	0.110	8.40E-05	0.112	0.754	79.19	7.95	2.85	C	1.15	12.56	65.2	8419	0.028	5.66E-05	0.116	0.755	79.19	22.67	2.81	C	0.95	28.33
131.5	8210	0.151	1.10E-04	0.112	0.755	79.19	6.00	2.87	C	1.25	11.98	71.3	8406	0.052	5.75E-05	0.116	0.756	79.19	14.63	2.82	C	0.95	20.66
137.0	8165	0.185	1.31E-04	0.111	0.755	79.19	4.98	2.89	C	1.21	10.47	77.3	8400	0.065	6.13E-05	0.116	0.756	79.19	12.31	2.82	C	0.97	14.60
158.6	8133	0.243	1.67E-04	0.110	0.755	79.19	3.86	2.91	C	1.26	8.97	85.0	8393	0.079	6.72E-05	0.116	0.756	79.19	10.53	2.83	C	1.01	12.51
183.9	8096	0.328	2.17E-04	0.110	0.757	79.19	2.91	2.95	C	1.30	7.70	105.3	8377	0.111	8.57E-05	0.116	0.757	79.19	7.83	2.84	C	1.11	12.35
197.2	8076	0.380	2.47E-04	0.109	0.757	79.19	2.52	2.97	C	1.32	7.53	129.9	8360	0.153	1.12E-04	0.115	0.757	79.19	5.91	2.86	C	1.22	11.81
207.3	8046	0.439	2.78E-04	0.109	0.758	79.19	2.20	2.99	C	1.31	7.78	135.9	8313	0.188	1.34E-04	0.114	0.757	79.19	4.90	2.88	C	1.18	10.33
227.9	7984	0.582	3.51E-04	0.107	0.759	79.19	1.67	3.04	C	1.31	8.93	157.8	8281	0.248	1.72E-04	0.114	0.758	79.19	3.79	2.90	C	1.22	8.87
65.3	8249	0.028	5.63E-05	0.113	0.753	79.19	22.87	2.82	C	0.97	28.80	183.5	8243	0.335	2.23E-04	0.113	0.759	79.19	2.85	2.93	C	1.27	7.62
71.5	8236	0.052	5.70E-05	0.113	0.753	79.19	14.75	2.83	C	0.96	21.10	197.1	8222	0.388	2.53E-04	0.113	0.760	79.19	2.47	2.95	C	1.29	7.47
77.5	8230	0.065	6.05E-05	0.113	0.754	79.19	12.42	2.83	C	0.99	14.86	207.8	8192	0.449	2.86E-04	0.112	0.761	79.19	2.15	2.98	C	1.29	7.74
85.2	8223	0.078	6.62E-05	0.113	0.754	79.19	10.63	2.84	C	1.03	12.65	229.6	8130	0.596	3.60E-04	0.111	0.762	79.19	1.63	3.03	C	1.28	9.03
105.5	8207	0.110	8.40E-05	0.112	0.754	79.19	7.92	2.85	C	1.13	12.50	64.5	8350	0.029	5.74E-05	0.116	0.755	79.19	21.93	2.81	C	0.94	28.45
130.1	8189	0.151	1.10E-04	0.112	0.755	79.19	5.99	2.87	C	1.24	11.92	70.8	8338	0.054	5.86E-05	0.115	0.755	79.19	14.23	2.82	C	0.93	20.65
135.5	8143	0.185	1.31E-04	0.111	0.755	79.19	4.97	2.89	C	1.20	10.41	76.9	8331	0.067	6.25E-05	0.115	0.756	79.19	11.99	2.82	C	0.96	14.48
157.0	8111	0.244	1.68E-04	0.110	0.755	79.19	3.85	2.91	C	1.24	8.92	84.7	8324	0.081	6.85E-05	0.115	0.756	79.19	10.27	2.83	C	1.00	12.37
182.0	8073	0.329	2.18E-04	0.110	0.757	79.19	2.90	2.95	C	1.29	7.64	105.1	8308	0.114	8.74E-05	0.115	0.756	79.19	7.65	2.84	C	1.11	12.22
195.3	8053	0.381	2.47E-04	0.109	0.757	79.19	2.52	2.97	C	1.30	7.48	129.8	8291	0.157	1.15E-04	0.115	0.757	79.19	5.77	2.86	C	1.21	11.66
205.4	8023	0.440	2.79E-04	0.109	0.758	79.19	2.19	2.99	C	1.30	7.74	136.5	8246	0.192	1.36E-04	0.114	0.757	79.19	4.79	2.88	C	1.18	10.28
226.2	7961	0.584	3.52E-04	0.107	0.759	79.19	1.67	3.04	C	1.30	8.91	158.4	8214	0.254	1.75E-04	0.113	0.758	79.19	3.71	2.90	C	1.23	8.81
65.1	8629	0.025	5.46E-05	0.117	0.756	79.19	23.95	2.80	C	0.96	28.61	184.1	8175	0.342	2.27E-04	0.112	0.759	79.19	2.79	2.94	C	1.27	7.57
71.3	8616	0.049	5.56E-05	0.116	0.756	79.19	15.34	2.81	C	0.95	20.85	197.7	8155	0.397	2.58E-04	0.112	0.760	79.19	2.42	2.96	C	1.29	7.42
77.3	8610	0.061	5.94E-05	0.116	0.756	79.19	12.88	2.82	C	0.97	14.75	208.3	8125	0.458	2.91E-04	0.111	0.760	79.19	2.11	2.98	C	1.28	7.70
85.0	8603	0.076	6.51E-05	0.116	0.756	79.19	10.99	2.82	C	1.01	12.64	229.9	8063	0.608	3.66E-04	0.110	0.762	79.19	1.60	3.04	C	1.28	8.97
105.4	8587	0.104	8.32E-05	0.116	0.757	79.19	8.15	2.84	C	1.11	12.46	82.7	7906	0.062	1.17E-04	0.113	0.754	79.19	12.80	2.83	C	0.87	40.32
130.0	8569	0.147	1.09E-04	0.116	0.757	79.19	6.13	2.85	C	1.21	11.88	117.8	7884	0.117	1.37E-04	0.113	0.755	79.19	7.54	2.85	C	1.10	16.98
136.0	8522	0.189	1.30E-04	0.114	0.757	79.19	5.08	2.87	C	1.17	10.41	137.1	7873	0.148	1.52E-04	0.113	0.755	79.19	6.09	2.87	C	1.20	17.54
157.6	8490	0.239	1.67E-04	0.114	0.758	79.19	3.92	2.90	C	1.22	8.92	153.4	7856	0.183	1.69E-04	0.112	0.756	79.19	5.02	2.88	C	1.26	17.31
183.0	8451	0.323	2.17E-04	0.113	0.759	79.19	2.94	2.93	C	1.26	7.66	174.4	7821	0.267	2.14E-04	0.112	0.757	79.19	3.54	2.91	C	1.28	14.84
196.4	8430	0.375	2.46E-04	0.113	0.760	79.19	2.55	2.95	C	1.28	7.50	179.8	7785	0.371	2.71E-04	0.111	0.759	79.19	2.58	2.95	C	1.18	22.75
206.6	8399	0.434	2.78E-04	0.112	0.760	79.19	2.22	2.97	C	1.27	7.76	106.0	7679	0.423	6.80E-05	0.108	0.757	79.19	2.28	2.99	C	1.14	68.13
227.6	8335	0.576	3.50E-04	0.111	0.762	79.19	1.69	3.02	C	1.27	9.04	151.6	7648	0.459	1.07E-04	0.107	0.757	79.19	2.10	3.00	C	1.47	17.86
65.8	8392	0.028	5.72E-05	0.116	0.755	79.19	22.59	2.81	C	0.96	28.56	181.9	7610	0.518	1.48E-04	0.106	0.757	79.19	1.87	3.03	C	1.61	14.72
72.0	8379	0.052	5.81E-05	0.116	0.756	79.19	14.54	2.82	C	0.95	20.85	190.1	7591	0.555	1.67E-04	0.106	0.757	79.19	1.75	3.04	C	1.63	12.79
78.1	8373	0.065	6.19E-05	0.116	0.756	79.19	12.23	2.82	C	0.98	14.77	192.1	7567	0.595	1.85E-04	0.105	0.758	79.19	1.64	3.06	C	1.59	11.26
85.9	8366	0.079	6.79E-05	0.116	0.756	79.19	10.45	2.83	C	1.02	12.65	187.4	7519	0.689	2.19E-04	0.104	0.758	79.19	1.42	3.09	C	1.48	20.57
106.5	8350	0.112	8.66E-05	0.116	0.757	79.19	7.77	2.84	C	1.12	12.47	82.1	8186	0.052	1.12E-04	0.114	0.754	79.19	14.68	2.82	C	0.88	40.25
131.3	8332	0.154	1.14E-04	0.115	0.757	79.19	5.85	2.86	C	1.23	11.89	116.5	8164	0.104	1.32E-04	0.114	0.755	79.19	8.31	2.85	C	1.09	16.85
137.6	8286	0.190	1.35E-04	0.114	0.757	79.19	4.85	2.88	C	1.19	10.42	135.5	8153	0.134	1.46E-04	0.114	0.756	79.19	6.64	2.86	C	1.19	17.35
159.6	8255	0.250	1.74E-04	0.113	0.758	79.19	3.75	2.90	C	1.23	8.93	151.4	8136	0.168	1.63E-04	0.113	0.756	79.19	5.44	2.87	C	1.25	17.11
185.4	8216	0.338	2.26E-04																				

151.9	7903	0.436	1.05E-04	0.108	0.757	79.19	2.22	2.99	C	1.44	17.74	189.1	9531	0.132	1.39E-04	0.116	0.757	79.71	6.74	2.89	C	1.51	15.66
182.5	7863	0.493	1.45E-04	0.107	0.757	79.19	1.97	3.02	C	1.58	14.57	226.3	9493	0.200	1.79E-04	0.115	0.758	79.71	4.62	2.92	C	1.58	13.71
190.8	7842	0.529	1.64E-04	0.106	0.758	79.19	1.84	3.03	C	1.59	12.66	237.4	9452	0.287	2.33E-04	0.115	0.760	79.71	3.29	2.96	C	1.46	20.14
193.2	7817	0.569	1.83E-04	0.106	0.758	79.19	1.71	3.05	C	1.56	11.11	146.1	9315	0.332	5.88E-05	0.111	0.758	79.71	2.87	2.99	C	1.37	71.99
189.3	7766	0.661	2.17E-04	0.104	0.758	79.19	1.48	3.08	C	1.46	20.12	196.3	9274	0.364	9.34E-05	0.110	0.757	79.71	2.63	3.00	C	1.68	19.92
81.4	8183	0.052	1.13E-04	0.114	0.754	79.19	14.77	2.82	C	0.87	40.76	227.9	9225	0.414	1.31E-04	0.109	0.758	79.71	2.32	3.03	C	1.78	15.80
115.9	8161	0.104	1.32E-04	0.114	0.755	79.19	8.33	2.85	C	1.08	16.83	236.8	9199	0.446	1.50E-04	0.108	0.758	79.71	2.16	3.04	C	1.78	13.53
135.0	8149	0.134	1.47E-04	0.114	0.756	79.19	6.64	2.86	C	1.18	17.27	237.5	9166	0.483	1.69E-04	0.107	0.758	79.71	2.01	3.06	C	1.73	11.68
151.0	8132	0.168	1.64E-04	0.113	0.756	79.19	5.43	2.87	C	1.24	16.99	232.6	9097	0.569	2.07E-04	0.106	0.758	79.71	1.71	3.09	C	1.60	19.25
172.1	8096	0.249	2.07E-04	0.113	0.757	79.19	3.77	2.90	C	1.25	14.57	90.3	9640	0.034	9.67E-05	0.117	0.756	79.71	19.79	2.85	C	0.95	35.99
177.9	8058	0.350	2.62E-04	0.112	0.759	79.19	2.73	2.94	C	1.16	22.50	134.9	9618	0.078	1.11E-04	0.117	0.757	79.71	10.61	2.87	C	1.23	15.31
104.5	7950	0.400	6.64E-05	0.109	0.757	79.19	2.40	2.98	C	1.09	68.18	163.2	9607	0.103	1.23E-04	0.116	0.757	79.71	8.38	2.88	C	1.39	15.93
150.2	7917	0.436	1.05E-04	0.108	0.757	79.19	2.21	2.99	C	1.42	17.70	189.1	9589	0.131	1.38E-04	0.116	0.758	79.71	6.79	2.89	C	1.51	15.71
181.2	7878	0.493	1.45E-04	0.107	0.757	79.19	1.97	3.02	C	1.57	14.53	226.2	9551	0.198	1.79E-04	0.116	0.759	79.71	4.65	2.92	C	1.58	13.72
189.8	7857	0.529	1.64E-04	0.106	0.758	79.19	1.84	3.03	C	1.58	12.62	237.7	9510	0.285	2.32E-04	0.115	0.760	79.71	3.31	2.95	C	1.46	20.14
192.3	7832	0.569	1.82E-04	0.106	0.758	79.19	1.71	3.05	C	1.55	11.10	146.4	9371	0.330	5.85E-05	0.111	0.758	79.71	2.89	2.99	C	1.37	71.56
188.5	7781	0.661	2.17E-04	0.104	0.758	79.19	1.48	3.08	C	1.45	20.22	196.1	9330	0.361	9.27E-05	0.110	0.758	79.71	2.65	3.00	C	1.67	19.80
81.8	8193	0.051	1.13E-04	0.114	0.754	79.19	14.82	2.82	C	0.88	40.73	228.1	9281	0.412	1.30E-04	0.109	0.758	79.71	2.34	3.03	C	1.78	15.72
116.2	8171	0.104	1.32E-04	0.114	0.755	79.19	8.35	2.84	C	1.08	16.77	237.4	9256	0.443	1.49E-04	0.108	0.758	79.71	2.18	3.04	C	1.78	13.50
135.3	8159	0.134	1.47E-04	0.114	0.756	79.19	6.66	2.86	C	1.18	17.20	238.5	9222	0.479	1.68E-04	0.107	0.758	79.71	2.02	3.05	C	1.73	11.64
151.4	8143	0.168	1.64E-04	0.113	0.756	79.19	5.44	2.87	C	1.24	16.93	234.6	9153	0.565	2.05E-04	0.106	0.758	79.71	1.72	3.09	C	1.61	19.13
172.9	8106	0.248	2.07E-04	0.113	0.757	79.19	3.78	2.90	C	1.26	14.51	90.5	9606	0.034	9.73E-05	0.117	0.756	79.71	19.61	2.85	C	0.95	35.90
179.4	8068	0.349	2.62E-04	0.112	0.759	79.19	2.73	2.94	C	1.17	22.51	135.7	9584	0.078	1.11E-04	0.116	0.757	79.71	10.53	2.87	C	1.24	15.33
105.5	7959	0.399	6.59E-05	0.109	0.757	79.19	2.41	2.98	C	1.11	68.05	164.2	9572	0.104	1.23E-04	0.116	0.757	79.71	8.32	2.88	C	1.40	15.99
151.4	7927	0.435	1.05E-04	0.108	0.757	79.19	2.22	2.99	C	1.43	17.70	189.9	9555	0.132	1.39E-04	0.116	0.758	79.71	6.74	2.89	C	1.51	15.72
182.1	7888	0.492	1.45E-04	0.107	0.757	79.19	1.97	3.02	C	1.58	14.54	225.2	9516	0.200	1.79E-04	0.115	0.759	79.71	4.62	2.92	C	1.57	13.68
190.6	7867	0.527	1.64E-04	0.106	0.758	79.19	1.84	3.03	C	1.59	12.60	234.1	9475	0.287	2.33E-04	0.115	0.760	79.71	3.29	2.96	C	1.44	20.02
192.7	7842	0.567	1.82E-04	0.106	0.758	79.19	1.72	3.05	C	1.56	11.08	146.2	9336	0.332	5.90E-05	0.111	0.758	79.71	2.87	2.99	C	1.37	71.52
188.4	7791	0.659	2.16E-04	0.104	0.758	79.19	1.48	3.08	C	1.45	20.06	196.2	9295	0.364	9.34E-05	0.110	0.758	79.71	2.63	3.00	C	1.67	19.74
81.4	8200	0.052	1.13E-04	0.114	0.754	79.19	14.71	2.82	C	0.87	40.61	228.3	9246	0.414	1.31E-04	0.109	0.758	79.71	2.32	3.03	C	1.78	15.68
115.4	8178	0.104	1.32E-04	0.114	0.755	79.19	8.31	2.85	C	1.08	16.69	237.5	9221	0.446	1.50E-04	0.108	0.758	79.71	2.16	3.04	C	1.78	13.47
134.3	8166	0.135	1.46E-04	0.114	0.756	79.19	6.64	2.86	C	1.17	17.11	238.7	9188	0.483	1.69E-04	0.107	0.758	79.71	2.01	3.06	C	1.73	11.62
150.2	8149	0.168	1.63E-04	0.113	0.756	79.19	5.43	2.87	C	1.23	16.80	234.9	9120	0.569	2.07E-04	0.106	0.758	79.71	1.71	3.09	C	1.61	19.09
171.5	8113	0.249	2.07E-04	0.113	0.757	79.19	3.77	2.90	C	1.25	14.41	90.0	9606	0.035	9.72E-05	0.117	0.756	79.71	19.53	2.85	C	0.95	35.59
177.8	8075	0.350	2.62E-04	0.112	0.759	79.19	2.73	2.94	C	1.16	22.40	134.3	9584	0.078	1.11E-04	0.117	0.757	79.71	10.52	2.87	C	1.23	15.13
103.1	7967	0.400	6.57E-05	0.109	0.757	79.19	2.41	2.98	C	1.08	69.13	162.6	9573	0.104	1.23E-04	0.116	0.757	79.71	8.32	2.88	C	1.39	15.76
148.9	7933	0.435	1.05E-04	0.108	0.757	79.19	2.22	2.99	C	1.41	17.68	188.6	9555	0.132	1.38E-04	0.116	0.758	79.71	6.75	2.89	C	1.50	15.49
179.8	7894	0.492	1.45E-04	0.107	0.757	79.19	1.97	3.02	C	1.55	14.49	226.3	9517	0.200	1.79E-04	0.116	0.759	79.71	4.62	2.92	C	1.58	13.59
188.3	7873	0.528	1.64E-04	0.106	0.758	79.19	1.84	3.03	C	1.57	12.55	238.4	9476	0.287	2.33E-04	0.115	0.760	79.71	3.29	2.95	C	1.46	19.95
190.8	7848	0.568	1.82E-04	0.106	0.758	79.19	1.71	3.05	C	1.54	11.04	145.8	9338	0.332	5.89E-05	0.111	0.758	79.71	2.87	2.99	C	1.36	71.97
186.9	7797	0.660	2.16E-04	0.104	0.758	79.19	1.48	3.08	C	1.44	20.25	196.0	9297	0.363	9.34E-05	0.110	0.758	79.71	2.64	3.00	C	1.67	19.83
81.8	8209	0.051	1.12E-04	0.114	0.754	79.19	14.81	2.82	C	0.88	40.61	228.2	9249	0.414	1.31E-04	0.109	0.758	79.71	2.33	3.03	C	1.78	15.75
115.9	8187	0.104	1.32E-04	0.114	0.755	79.19	8.35	2.84	C	1.08	16.74	237.5	9223	0.446	1.51E-04	0.108	0.758	79.71	2.16	3.04	C	1.78	13.49
134.8	8175	0.134	1.46E-04	0.114	0.756	79.19	6.66	2.86	C	1.18	17.17	238.4	9190	0.482	1.69E-04	0.107	0.758	79.71	2.01	3.06	C	1.73	11.66
150.9	8159	0.167	1.63E-04	0.114	0.756	79.19	5.45	2.87	C	1.24	16.90	233.9	9121	0.569	2.07E-04	0.106	0.758	79.71	1.71	3.09	C	1.60	19.21
172.5	8123	0.248	2.07E-04	0.113	0.757	79.19	3.79	2.90	C	1.25	14.51	90.3	9617	0.034	9.71E-05	0.117	0.756	79.71	19.64	2.85	C	0.95	36.11
179.3	8085	0.349	2.62E-04	0.113	0.759	79.19	2.74	2.94	C	1.16	22.50	134.9	9595	0.078	1.11E-04	0.117	0.757	79.71	10.55	2.87	C	1.23	15.29
103.8	7976	0.398	6.53E-05	0.109	0.757	79.19	2.41	2.97	C	1.09	68.96	163.4	9583	0.103	1.23E-04	0.116	0.757	79.71	8.34	2.88	C	1.39	15.94
150.3	7943	0.434	1.04E-04	0.108	0.757	79.19	2.22	2.99	C	1.42	17.66	189.5	9566	0.131	1.38E-04	0.116	0.758	79.71	6.76	2.89	C	1.51	15.66
181.4	7904	0.491	1.45E-04	0.107	0.758	79.19	1.97	3.02	C	1.57	14.47	227.3	9528	0.199	1.79E-04	0.116	0.759	79.71	4.63	2.92	C	1.58	13.71
189.9	7883	0.526	1.64E-04	0.107	0.758	79.19	1.84	3.03	C	1.58	12.56	239.2	9487	0.287	2.33E-04	0.115	0.760	79.71	3.30	2.95	C	1.47	20.19
192.1	7857	0.566	1.82E-04	0.106	0.758	79.19	1.72	3.05	C	1.55	11.03	146.8	9348	0.332	5.91E-05	0.111	0.758	79.71	2.87	2.99	C	1.37	72.05
187.6	7805	0.659	2.16E-04	0.105	0.758	79.19	1.48	3.08	C	1.44	20.14	196.6	9307	0.363	9.36E-05	0.110	0.758	79.71	2.64	3.00	C	1.68	19.82

302.8	9168	0.551	3.70E-04	0.108	0.760	79.71	1.76	3.07	C	1.52	7.57
83.4	8203	0.038	8.83E-05	0.114	0.754	79.71	18.62	2.86	C	1.01	36.43
114.8	8186	0.076	9.58E-05	0.114	0.755	79.71	10.81	2.88	C	1.24	15.83
134.2	8178	0.098	1.03E-04	0.114	0.755	79.71	8.78	2.89	C	1.37	16.62
152.5	8166	0.121	1.13E-04	0.114	0.756	79.71	7.30	2.90	C	1.47	16.31
181.2	8142	0.175	1.42E-04	0.113	0.756	79.71	5.22	2.92	C	1.55	14.61
193.6	8116	0.243	1.80E-04	0.113	0.758	79.71	3.86	2.95	C	1.49	22.84
134.8	8038	0.282	8.64E-05	0.110	0.756	79.71	3.35	2.97	C	1.31	60.69
181.0	8007	0.325	1.30E-04	0.110	0.757	79.71	2.93	2.99	C	1.56	16.22
216.8	7971	0.394	1.79E-04	0.109	0.757	79.71	2.44	3.02	C	1.67	13.24
229.5	7952	0.437	2.04E-04	0.108	0.758	79.71	2.21	3.04	C	1.69	11.48
235.3	7926	0.486	2.28E-04	0.108	0.758	79.71	1.99	3.05	C	1.66	10.07
239.5	7872	0.601	2.77E-04	0.106	0.759	79.71	1.62	3.10	C	1.58	17.89
87.1	9506	0.018	5.30E-05	0.115	0.755	79.71	28.96	2.85	C	1.25	26.89
109.2	9492	0.041	5.42E-05	0.115	0.755	79.71	17.49	2.86	C	1.38	22.45
122.2	9485	0.053	5.70E-05	0.115	0.755	79.71	14.47	2.87	C	1.47	17.71
134.5	9477	0.065	6.12E-05	0.115	0.755	79.71	12.25	2.87	C	1.53	16.03
154.1	9460	0.094	7.39E-05	0.114	0.756	79.71	9.06	2.89	C	1.57	15.31
163.6	9441	0.129	9.21E-05	0.114	0.756	79.71	6.90	2.90	C	1.51	13.16
147.7	9383	0.156	1.01E-04	0.113	0.755	79.71	5.82	2.92	C	1.30	10.90
202.9	9346	0.206	1.54E-04	0.112	0.756	79.71	4.51	2.94	C	1.51	9.39
252.6	9301	0.287	2.19E-04	0.111	0.757	79.71	3.30	2.97	C	1.61	8.04
273.8	9276	0.339	2.54E-04	0.111	0.758	79.71	2.81	2.99	C	1.63	7.67
285.3	9237	0.400	2.90E-04	0.110	0.758	79.71	2.40	3.02	C	1.60	7.50
302.0	9156	0.548	3.67E-04	0.108	0.760	79.71	1.77	3.07	C	1.53	7.55
86.3	9488	0.018	5.31E-05	0.115	0.755	79.71	28.95	2.85	C	1.24	27.16
108.5	9474	0.041	5.44E-05	0.115	0.755	79.71	17.48	2.86	C	1.38	22.64
121.8	9467	0.053	5.73E-05	0.115	0.755	79.71	14.45	2.87	C	1.46	17.79
134.4	9459	0.066	6.16E-05	0.115	0.755	79.71	12.22	2.87	C	1.53	16.07
155.0	9442	0.094	7.47E-05	0.114	0.756	79.71	9.03	2.89	C	1.58	15.36
165.4	9423	0.129	9.35E-05	0.114	0.756	79.71	6.86	2.90	C	1.52	13.26
149.5	9366	0.157	1.03E-04	0.113	0.756	79.71	5.78	2.92	C	1.30	10.92
203.6	9330	0.208	1.56E-04	0.112	0.756	79.71	4.47	2.94	C	1.51	9.41
253.0	9285	0.289	2.21E-04	0.111	0.757	79.71	3.27	2.97	C	1.61	8.05
274.2	9260	0.342	2.56E-04	0.111	0.758	79.71	2.79	2.99	C	1.63	7.68
285.8	9221	0.403	2.93E-04	0.110	0.758	79.71	2.38	3.02	C	1.60	7.52
303.1	9140	0.553	3.73E-04	0.108	0.760	79.71	1.76	3.07	C	1.52	7.61
86.4	9508	0.018	5.31E-05	0.115	0.755	79.71	29.10	2.85	C	1.24	27.05
108.0	9494	0.041	5.44E-05	0.115	0.755	79.71	17.53	2.86	C	1.37	22.48
121.0	9487	0.053	5.72E-05	0.115	0.755	79.71	14.49	2.87	C	1.45	17.55
133.5	9479	0.065	6.15E-05	0.115	0.755	79.71	12.25	2.87	C	1.51	15.86
154.3	9462	0.094	7.45E-05	0.115	0.756	79.71	9.05	2.88	C	1.57	15.14
165.6	9444	0.129	9.31E-05	0.114	0.756	79.71	6.88	2.90	C	1.52	13.15
146.5	9384	0.156	1.00E-04	0.113	0.756	79.71	5.80	2.92	C	1.29	10.80
203.3	9348	0.206	1.55E-04	0.112	0.756	79.71	4.50	2.94	C	1.51	9.30
253.4	9303	0.288	2.21E-04	0.111	0.757	79.71	3.29	2.97	C	1.61	7.96
274.3	9279	0.341	2.56E-04	0.111	0.758	79.71	2.80	2.99	C	1.63	7.59
284.8	9240	0.402	2.92E-04	0.110	0.758	79.71	2.39	3.02	C	1.59	7.41
299.1	9158	0.551	3.69E-04	0.108	0.760	79.71	1.76	3.07	C	1.51	7.42
86.4	9500	0.018	5.30E-05	0.115	0.754	79.71	29.57	2.85	C	1.24	26.11
108.4	9487	0.040	5.42E-05	0.115	0.755	79.71	17.72	2.86	C	1.38	22.07
121.4	9480	0.052	5.71E-05	0.115	0.755	79.71	14.62	2.87	C	1.46	17.51
133.7	9472	0.065	6.13E-05	0.115	0.755	79.71	12.35	2.87	C	1.52	15.94
153.4	9455	0.093	7.42E-05	0.114	0.756	79.71	9.12	2.89	C	1.57	15.18
163.1	9436	0.128	9.25E-05	0.114	0.756	79.71	6.92	2.90	C	1.50	13.05
150.8	9379	0.156	1.03E-04	0.113	0.755	79.71	5.82	2.92	C	1.31	10.83
203.9	9344	0.206	1.55E-04	0.112	0.756	79.71	4.50	2.94	C	1.52	9.41
253.2	9300	0.287	2.18E-04	0.111	0.757	79.71	3.30	2.97	C	1.62	8.07
274.5	9276	0.339	2.54E-04	0.111	0.758	79.71	2.81	2.99	C	1.64	7.68
285.9	9237	0.400	2.91E-04	0.110	0.758	79.71	2.40	3.02	C	1.60	7.48
303.0	9156	0.549	3.72E-04	0.108	0.760	79.71	1.77	3.07	C	1.52	7.47
82.9	8188	0.038	8.86E-05	0.114	0.754	79.71	18.45	2.86	C	1.00	36.23
113.8	8172	0.077	9.60E-05	0.114	0.755	79.71	10.74	2.88	C	1.23	15.75
132.9	8163	0.098	1.04E-04	0.114	0.755	79.71	8.73	2.89	C	1.35	16.50
150.9	8152	0.122	1.14E-04	0.114	0.756	79.71	7.26	2.90	C	1.45	16.18
179.0	8127	0.176	1.42E-04	0.113	0.756	79.71	5.19	2.92	C	1.54	14.49
191.3	8101	0.244	1.81E-04	0.113	0.758	79.71	3.84	2.95	C	1.47	22.65
135.4	8025	0.284	8.66E-05	0.111	0.757	79.71	3.34	2.97	C	1.31	60.05
180.7	7994	0.327	1.31E-04	0.110	0.757	79.71	2.92	2.99	C	1.56	16.07
215.7	7957	0.396	1.79E-04	0.109	0.757	79.71	2.43	3.02	C	1.67	13.09
228.3	7937	0.439	2.04E-04	0.108	0.758	79.71	2.20	3.04	C	1.68	11.35
234.0	7911	0.488	2.28E-04	0.108	0.758	79.71	1.99	3.06	C	1.66	9.97
238.6	7858	0.603	2.78E-04	0.106	0.759	79.71	1.62	3.10	C	1.57	17.67
83.3	8189	0.038	8.75E-05	0.114	0.754	79.71	18.60	2.87	C	1.01	36.70
114.1	8173	0.076	9.46E-05	0.114	0.755	79.71	10.85	2.88	C	1.24	15.96
133.2	8165	0.097	1.02E-04	0.114	0.755	79.71	8.83	2.89	C	1.37	16.74
151.2	8154	0.120	1.12E-04	0.113	0.755	79.71	7.35	2.90	C	1.47	16.42
179.6	8129	0.174	1.39E-04	0.113	0.756	79.71	5.27	2.92	C	1.55	14.75
192.1	8104	0.240	1.77E-04	0.113	0.757	79.71	3.90	2.95	C	1.49	23.12
136.2	8029	0.279	8.56E-05	0.110	0.756	79.71	3.39	2.97	C	1.32	60.73
181.9	7998	0.322	1.29E-04	0.109	0.756	79.71	2.96	2.99	C	1.57	16.28
217.3	7961	0.390	1.77E-04	0.109	0.757	79.71	2.47	3.02	C	1.68	13.28
230.0	7942	0.432	2.02E-04	0.108	0.758	79.71	2.23	3.04	C	1.70	11.51
236.0	7916	0.480	2.25E-04	0.108	0.758	79.71	2.02	3.05	C	1.68	10.13
240.9	7863	0.594	2.74E-04	0.106	0.759	79.71	1.64	3.09	C	1.60	17.94
83.3	8220	0.038	8.72E-05	0.114	0.754	79.71	18.61	2.86	C	1.01	36.47
114.3	8203	0.076	9.43E-05	0.114	0.755	79.71	10.87	2.88	C	1.24	15.94
133.5	8195	0.097	1.02E-04	0.114	0.755	79.71	8.85	2.89	C	1.37	16.74
151.4	8184	0.120	1.12E-04	0.114	0.756	79.71	7.36	2.90	C	1.47	16.41
179.2	8159	0.173	1.39E-04	0.113	0.756	79.71	5.28	2.92	C	1.55	14.71
190.9	8133	0.240	1.77E-04	0.113	0.757	79.71	3.90	2.95	C	1.47	22.94
134.9	8057	0.278	8.53E-05	0.110	0.756	79.71	3.40	2.97	C	1.31	60.02

180.1	8026	0.321	1.29E-04	0.110	0.757	79.71	2.97	2.99	C	1.55	16.07
215.3	7989	0.389	1.76E-04	0.109	0.757	79.71	2.47	3.02	C	1.67	13.10
228.0	7970	0.431	2.00E-04	0.108	0.758	79.71	2.24	3.03	C	1.69	11.39
233.9	7944	0.479	2.24E-04	0.108	0.758	79.71	2.02	3.05	C	1.66	10.03
238.8	7890	0.592	2.72E-04	0.106	0.759	79.71	1.65	3.09	C	1.58	17.73
83.5	8189	0.038	8.71E-05	0.114	0.754	79.71	18.60	2.87	C	1.02	36.97
114.3	8173	0.076	9.41E-05	0.114	0.755	79.71	10.87	2.88	C	1.24	16.19
133.3	8165	0.097	1.01E-04	0.114	0.755	79.71	8.85	2.89	C	1.37	17.03
151.1	8154	0.119	1.11E-04	0.113	0.755	79.71	7.37	2.90	C	1.47	16.73
179.3	8130	0.173	1.38E-04	0.113	0.756	79.71	5.29	2.92	C	1.55	15.03
191.7	8104	0.239	1.75E-04	0.113	0.757	79.71	3.92	2.95	C	1.49	23.55
136.1	8029	0.277	8.47E-05	0.110	0.756	7					

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171.1	9890	0.179	1.91E-04	0.137	0.773	86.20	4.99	2.98	C	1.19	18.83	226.5	9622	0.761	2.81E-04	0.128	0.777	86.20	1.28	3.15	C	1.38	15.76
208.4	9855	0.272	2.42E-04	0.136	0.774	86.20	3.41	3.01	C	1.28	16.98	64.8	9580	0.028	6.08E-05	0.132	0.767	86.20	20.71	2.96	C	0.86	20.94
228.2	9819	0.386	3.03E-04	0.136	0.776	86.20	2.45	3.04	C	1.25	27.46	76.3	9568	0.054	6.40E-05	0.132	0.768	86.20	13.39	2.97	C	0.91	15.66
143.3	9694	0.445	9.83E-05	0.132	0.774	86.20	2.15	3.06	C	1.26	41.13	85.0	9562	0.069	6.89E-05	0.132	0.768	86.20	11.24	2.97	C	0.96	12.57
177.4	9656	0.492	1.37E-04	0.131	0.774	86.20	1.95	3.08	C	1.42	15.37	95.2	9556	0.084	7.57E-05	0.132	0.768	86.20	9.58	2.98	C	1.02	11.74
203.5	9613	0.562	1.83E-04	0.130	0.775	86.20	1.72	3.10	C	1.48	13.25	119.8	9542	0.120	9.59E-05	0.131	0.768	86.20	7.11	2.99	C	1.14	11.93
212.9	9591	0.605	2.07E-04	0.129	0.775	86.20	1.60	3.11	C	1.49	11.65	146.4	9526	0.166	1.24E-04	0.131	0.769	86.20	5.37	3.00	C	1.24	11.59
218.0	9563	0.653	2.31E-04	0.128	0.776	86.20	1.48	3.13	C	1.46	10.22	150.6	9474	0.204	1.46E-04	0.130	0.769	86.20	4.46	3.02	C	1.18	10.12
223.7	9508	0.766	2.80E-04	0.127	0.777	86.20	1.27	3.16	C	1.38	15.73	169.9	9444	0.267	1.84E-04	0.129	0.769	86.20	3.48	3.03	C	1.21	8.68
84.4	9973	0.045	1.26E-04	0.138	0.771	86.20	14.97	2.94	C	0.78	49.68	190.0	9410	0.357	2.35E-04	0.128	0.770	86.20	2.65	3.06	C	1.21	7.36
124.6	9953	0.104	1.52E-04	0.138	0.772	86.20	7.96	2.96	C	0.99	18.52	199.9	9392	0.412	2.64E-04	0.128	0.771	86.20	2.31	3.07	C	1.21	7.10
148.6	9942	0.139	1.70E-04	0.138	0.773	86.20	6.24	2.97	C	1.10	18.83	206.7	9363	0.472	2.95E-04	0.127	0.772	86.20	2.03	3.09	C	1.19	7.17
171.3	9926	0.177	1.91E-04	0.137	0.773	86.20	5.03	2.98	C	1.19	18.74	220.1	9305	0.617	3.65E-04	0.126	0.773	86.20	1.57	3.13	C	1.16	8.24
208.5	9891	0.270	2.41E-04	0.137	0.774	86.20	3.44	3.00	C	1.28	16.87	83.8	10058	0.044	1.25E-04	0.139	0.772	86.20	15.15	2.94	C	0.78	50.07
228.2	9855	0.384	3.02E-04	0.136	0.776	86.20	2.47	3.03	C	1.25	27.26	123.2	10038	0.103	1.51E-04	0.138	0.773	86.20	8.04	2.96	C	0.98	18.46
141.0	9726	0.442	9.71E-05	0.132	0.774	86.20	2.16	3.06	C	1.24	42.43	146.8	10027	0.137	1.69E-04	0.138	0.773	86.20	6.30	2.97	C	1.09	18.67
176.3	9689	0.489	1.37E-04	0.131	0.775	86.20	1.96	3.08	C	1.41	15.47	169.0	10011	0.175	1.89E-04	0.138	0.773	86.20	5.08	2.98	C	1.17	18.49
203.1	9646	0.559	1.82E-04	0.130	0.775	86.20	1.73	3.10	C	1.48	13.31	206.0	9975	0.267	2.39E-04	0.137	0.775	86.20	3.46	3.00	C	1.26	16.66
212.5	9624	0.602	2.06E-04	0.129	0.775	86.20	1.61	3.11	C	1.48	11.72	226.3	9939	0.380	3.01E-04	0.137	0.776	86.20	2.49	3.03	C	1.23	27.08
217.3	9596	0.650	2.30E-04	0.129	0.776	86.20	1.49	3.12	C	1.45	10.26	139.7	9811	0.439	9.72E-05	0.133	0.775	86.20	2.17	3.06	C	1.22	42.01
221.9	9540	0.762	2.78E-04	0.127	0.777	86.20	1.28	3.15	C	1.37	15.99	173.9	9773	0.485	1.36E-04	0.132	0.775	86.20	1.98	3.08	C	1.38	15.31
85.1	9988	0.045	1.26E-04	0.138	0.772	86.20	15.06	2.94	C	0.79	50.99	200.2	9730	0.555	1.82E-04	0.130	0.775	86.20	1.74	3.10	C	1.45	13.17
126.0	9967	0.104	1.53E-04	0.138	0.772	86.20	7.98	2.96	C	1.00	18.71	209.7	9708	0.598	2.05E-04	0.130	0.776	86.20	1.62	3.11	C	1.45	11.58
150.3	9956	0.139	1.71E-04	0.138	0.773	86.20	6.25	2.97	C	1.11	19.04	214.8	9680	0.646	2.29E-04	0.129	0.776	86.20	1.50	3.12	C	1.43	10.14
173.2	9940	0.177	1.91E-04	0.138	0.773	86.20	5.03	2.98	C	1.20	18.95	220.4	9623	0.758	2.78E-04	0.128	0.777	86.20	1.28	3.15	C	1.35	15.83
210.3	9905	0.270	2.42E-04	0.137	0.775	86.20	3.43	3.00	C	1.28	17.03	64.7	9582	0.028	6.06E-05	0.132	0.767	86.20	20.62	2.96	C	0.86	20.55
229.4	9869	0.384	3.03E-04	0.136	0.776	86.20	2.46	3.03	C	1.25	27.42	76.0	9570	0.054	6.38E-05	0.132	0.768	86.20	13.37	2.97	C	0.91	15.43
146.3	9741	0.443	9.91E-05	0.132	0.775	86.20	2.15	3.06	C	1.28	41.29	84.7	9564	0.069	6.86E-05	0.132	0.768	86.20	11.23	2.97	C	0.96	12.44
180.2	9703	0.490	1.39E-04	0.131	0.775	86.20	1.96	3.08	C	1.43	15.59	94.9	9558	0.084	7.55E-05	0.132	0.768	86.20	9.58	2.98	C	1.01	11.64
206.0	9659	0.561	1.84E-04	0.130	0.775	86.20	1.72	3.10	C	1.49	13.40	119.3	9544	0.120	9.56E-05	0.131	0.768	86.20	7.11	2.99	C	1.14	11.84
215.3	9636	0.605	2.08E-04	0.130	0.776	86.20	1.60	3.11	C	1.49	11.78	145.8	9528	0.166	1.24E-04	0.131	0.769	86.20	5.38	3.00	C	1.23	11.49
220.3	9609	0.653	2.33E-04	0.129	0.776	86.20	1.48	3.12	C	1.46	10.31	150.1	9477	0.203	1.45E-04	0.130	0.769	86.20	4.47	3.02	C	1.18	10.04
225.9	9553	0.767	2.83E-04	0.127	0.777	86.20	1.27	3.15	C	1.38	15.82	169.4	9447	0.267	1.83E-04	0.129	0.769	86.20	3.49	3.03	C	1.20	8.64
84.4	10016	0.045	1.25E-04	0.138	0.772	86.20	14.98	2.94	C	0.78	49.90	189.7	9413	0.356	2.34E-04	0.128	0.770	86.20	2.66	3.06	C	1.21	7.33
124.5	9996	0.104	1.52E-04	0.138	0.772	86.20	7.97	2.96	C	0.99	18.61	199.7	9395	0.410	2.63E-04	0.128	0.771	86.20	2.32	3.07	C	1.21	7.07
148.5	9985	0.138	1.70E-04	0.138	0.773	86.20	6.25	2.97	C	1.10	18.92	206.4	9367	0.471	2.94E-04	0.127	0.772	86.20	2.04	3.09	C	1.19	7.13
171.2	9969	0.177	1.90E-04	0.138	0.773	86.20	5.04	2.98	C	1.18	18.81	219.8	9308	0.614	3.63E-04	0.126	0.773	86.20	1.58	3.13	C	1.16	8.15
208.5	9933	0.269	2.41E-04	0.137	0.774	86.20	3.44	3.00	C	1.27	16.97	65.4	9565	0.029	6.12E-05	0.132	0.767	86.20	20.25	2.96	C	0.87	20.56
228.5	9897	0.383	3.02E-04	0.136	0.776	86.20	2.47	3.03	C	1.25	27.39	76.4	9553	0.056	6.40E-05	0.131	0.767	86.20	13.18	2.97	C	0.91	15.46
143.2	9768	0.442	9.91E-05	0.132	0.775	86.20	2.16	3.06	C	1.25	38.37	84.9	9547	0.070	6.87E-05	0.131	0.768	86.20	11.09	2.98	C	0.96	12.47
175.7	9729	0.489	1.37E-04	0.131	0.775	86.20	1.96	3.08	C	1.40	15.05	95.0	9541	0.085	7.55E-05	0.131	0.768	86.20	9.48	2.98	C	1.01	11.66
201.2	9685	0.559	1.82E-04	0.130	0.775	86.20	1.72	3.10	C	1.46	13.00	119.2	9526	0.121	9.55E-05	0.131	0.768	86.20	7.06	2.99	C	1.13	11.82
210.6	9663	0.602	2.06E-04	0.129	0.775	86.20	1.61	3.11	C	1.46	11.44	145.6	9511	0.167	1.23E-04	0.131	0.769	86.20	5.34	3.00	C	1.23	11.46
216.1	9635	0.650	2.30E-04	0.129	0.776	86.20	1.49	3.12	C	1.44	10.04	149.7	9458	0.204	1.45E-04	0.129	0.768	86.20	4.45	3.02	C	1.18	9.99
223.0	9579	0.764	2.82E-04	0.127	0.777	86.20	1.28	3.15	C	1.37	15.10	169.1	9429	0.268	1.83E-04	0.129	0.769	86.20	3.47	3.04	C	1.20	8.60
84.6	10044	0.044	1.25E-04	0.138	0.772	86.20	15.17	2.94	C	0.79	50.26	189.6	9395	0.357	2.34E-04	0.128	0.770	86.20	2.65	3.06	C	1.21	7.31
124.8	10024	0.103	1.51E-04	0.138	0.773	86.20	8.03	2.96	C	0.99	18.61	199.7	9377	0.412	2.63E-04	0.128	0.771	86.20	2.32	3.07	C	1.21	7.04
148.8	10013	0.137	1.69E-04	0.138	0.773	86.20	6.29	2.97	C	1.10	18.89	206.6	9349	0.472	2.94E-04	0.127	0.772	86.20	2.03	3.09	C	1.20	7.11
171.5	9997	0.176	1.90E-04	0.138	0.773	86.20	5.07	2.98	C	1.19	18.75	220.4	9291	0.616	3.64E-04	0.125	0.773	86.20	1.57	3.13	C	1.16	8.14
209.0	9962	0.268	2.40E-04	0.137	0.775	86.20	3.46	3.00	C	1.27	16.90	64.0	9577	0.029	6.04E-05	0.132	0.767	86.20	20.41	2.96	C	0.85	20.70
229.2	9926	0.381	3.01E-04	0.137	0.776	86.20	2.48	3.03	C	1.25	27.39	75.2	9566	0.055	6.37E-05	0.131	0.767	86.20	13.29	2.97	C	0.90	15.46
142.3	9796	0.440	9.72E-05	0.133	0.775	86.20	2.17	3.06	C	1.25	41.95	83.7	9560	0.069	6.85E-05	0.131	0.768	86.20	11.18	2.98	C	0.95	12.34
177.4	9758	0.486	1.37E-04	0.132	0.775	86.20	1.97	3.08	C	1.41	15.42	93.7	9553	0.084	7.54E-05	0.131	0.768	86.20	9.54	2.98	C	1.00	11.49
204.1	9715																						

168.0	9446	0.267	1.83E-04	0.129	0.769	86.20	3.48	3.04	C	1.20	8.59	145.3	8220	0.160	1.50E-04	0.130	0.768	86.20	5.56	3.00	C	1.27	16.74
188.0	9411	0.356	2.33E-04	0.128	0.770	86.20	2.66	3.06	C	1.20	7.29	169.4	8199	0.230	1.81E-04	0.130	0.769	86.20	3.99	3.02	C	1.35	15.28
197.8	9392	0.410	2.62E-04	0.127	0.771	86.20	2.32	3.08	C	1.20	7.02	179.9	8178	0.314	2.18E-04	0.129	0.770	86.20	2.99	3.04	C	1.31	24.86
204.5	9364	0.471	2.93E-04	0.127	0.771	86.20	2.04	3.09	C	1.18	7.11	128.0	8108	0.361	1.10E-04	0.127	0.770	86.20	2.63	3.07	C	1.21	47.45
218.1	9306	0.614	3.63E-04	0.125	0.773	86.20	1.58	3.13	C	1.15	8.15	166.0	8082	0.413	1.56E-04	0.126	0.770	86.20	2.31	3.08	C	1.41	13.83
64.9	9588	0.029	6.03E-05	0.132	0.767	86.20	20.16	2.96	C	0.86	20.71	194.2	8052	0.491	2.04E-04	0.125	0.771	86.20	1.96	3.10	C	1.49	11.69
76.0	9577	0.055	6.33E-05	0.131	0.767	86.20	13.20	2.97	C	0.91	15.54	203.4	8036	0.539	2.28E-04	0.125	0.771	86.20	1.79	3.12	C	1.50	10.30
84.4	9571	0.070	6.80E-05	0.131	0.768	86.20	11.12	2.98	C	0.96	12.49	207.8	8017	0.591	2.51E-04	0.124	0.772	86.20	1.64	3.13	C	1.48	9.18
94.4	9564	0.085	7.48E-05	0.131	0.768	86.20	9.52	2.98	C	1.01	11.67	209.7	7978	0.711	2.95E-04	0.123	0.773	86.20	1.37	3.16	C	1.40	16.86
118.5	9550	0.121	9.46E-05	0.131	0.768	86.20	7.09	2.99	C	1.13	11.83	81.3	8252	0.051	1.10E-04	0.131	0.767	86.20	14.01	2.97	C	0.90	40.10
144.5	9534	0.166	1.22E-04	0.131	0.769	86.20	5.38	3.00	C	1.23	11.45	112.1	8237	0.101	1.26E-04	0.130	0.767	86.20	8.24	2.99	C	1.10	16.18
148.5	9481	0.203	1.44E-04	0.129	0.768	86.20	4.48	3.02	C	1.17	10.00	129.3	8230	0.129	1.37E-04	0.130	0.768	86.20	6.68	2.99	C	1.20	16.66
167.7	9452	0.266	1.81E-04	0.129	0.769	86.20	3.50	3.04	C	1.20	8.59	145.0	8220	0.160	1.50E-04	0.130	0.768	86.20	5.55	3.00	C	1.27	16.65
187.8	9418	0.354	2.32E-04	0.128	0.770	86.20	2.67	3.06	C	1.20	7.30	169.2	8198	0.231	1.82E-04	0.130	0.769	86.20	3.98	3.02	C	1.34	15.18
197.7	9401	0.408	2.61E-04	0.128	0.771	86.20	2.33	3.07	C	1.20	7.04	179.9	8177	0.315	2.20E-04	0.129	0.770	86.20	2.98	3.04	C	1.30	24.66
204.5	9372	0.468	2.91E-04	0.127	0.771	86.20	2.05	3.09	C	1.19	7.10	126.6	8105	0.362	1.10E-04	0.127	0.770	86.20	2.62	3.07	C	1.20	46.43
217.9	9314	0.611	3.60E-04	0.125	0.773	86.20	1.59	3.13	C	1.15	8.12	164.4	8079	0.414	1.56E-04	0.126	0.770	86.20	2.30	3.08	C	1.39	13.60
73.4	8342	0.036	7.01E-05	0.131	0.767	86.20	17.90	2.97	C	1.00	25.45	192.4	8049	0.493	2.05E-04	0.125	0.771	86.20	1.95	3.10	C	1.48	11.51
85.5	8331	0.066	7.38E-05	0.131	0.767	86.20	11.59	2.98	C	1.05	18.33	201.6	8034	0.541	2.29E-04	0.125	0.771	86.20	1.78	3.12	C	1.48	10.15
94.5	8326	0.082	7.90E-05	0.131	0.767	86.20	9.74	2.98	C	1.11	13.20	205.7	8014	0.594	2.52E-04	0.124	0.772	86.20	1.63	3.13	C	1.46	9.04
105.1	8320	0.100	8.64E-05	0.131	0.768	86.20	8.31	2.99	C	1.17	11.71	207.1	7974	0.715	2.97E-04	0.123	0.773	86.20	1.36	3.16	C	1.38	16.51
130.6	8307	0.141	1.08E-04	0.130	0.768	86.20	6.19	3.00	C	1.29	11.68	81.3	8259	0.051	1.09E-04	0.131	0.767	86.20	14.01	2.97	C	0.90	40.29
158.8	8293	0.192	1.38E-04	0.130	0.769	86.20	4.70	3.01	C	1.41	11.20	111.9	8244	0.101	1.26E-04	0.131	0.767	86.20	8.24	2.99	C	1.09	16.19
163.7	8252	0.234	1.62E-04	0.129	0.769	86.20	3.94	3.03	C	1.35	9.86	128.9	8236	0.129	1.37E-04	0.130	0.768	86.20	6.68	2.99	C	1.19	16.67
185.7	8227	0.304	2.02E-04	0.128	0.770	86.20	3.08	3.05	C	1.39	8.60	144.5	8226	0.160	1.50E-04	0.130	0.768	86.20	5.55	3.00	C	1.26	16.65
210.2	8198	0.403	2.57E-04	0.128	0.771	86.20	2.37	3.07	C	1.42	7.46	168.5	8205	0.231	1.81E-04	0.130	0.769	86.20	3.98	3.02	C	1.34	15.18
222.8	8183	0.462	2.88E-04	0.127	0.772	86.20	2.07	3.09	C	1.42	7.21	179.5	8183	0.315	2.19E-04	0.129	0.770	86.20	2.98	3.04	C	1.30	24.75
232.5	8161	0.528	3.21E-04	0.127	0.772	86.20	1.82	3.11	C	1.42	7.31	125.9	8112	0.362	1.10E-04	0.127	0.770	86.20	2.62	3.07	C	1.19	47.03
252.5	8117	0.685	3.96E-04	0.126	0.774	86.20	1.42	3.14	C	1.39	7.97	164.1	8086	0.414	1.56E-04	0.126	0.770	86.20	2.31	3.08	C	1.39	13.64
81.2	8203	0.051	1.10E-04	0.130	0.766	86.20	13.98	2.98	C	0.90	39.71	192.4	8056	0.493	2.05E-04	0.125	0.771	86.20	1.95	3.10	C	1.47	11.54
111.9	8189	0.102	1.27E-04	0.130	0.767	86.20	8.20	2.99	C	1.10	16.14	201.7	8041	0.541	2.29E-04	0.125	0.771	86.20	1.78	3.12	C	1.48	10.18
129.0	8181	0.130	1.38E-04	0.130	0.768	86.20	6.65	3.00	C	1.19	16.68	206.0	8021	0.593	2.52E-04	0.124	0.772	86.20	1.63	3.13	C	1.46	9.07
144.7	8171	0.161	1.51E-04	0.130	0.768	86.20	5.52	3.00	C	1.27	16.70	207.4	7982	0.714	2.96E-04	0.123	0.773	86.20	1.36	3.16	C	1.38	16.70
169.1	8150	0.232	1.83E-04	0.129	0.769	86.20	3.96	3.02	C	1.34	15.26	73.7	8313	0.035	7.02E-05	0.131	0.767	86.20	18.25	2.97	C	1.01	24.63
180.3	8128	0.317	2.21E-04	0.129	0.770	86.20	2.97	3.05	C	1.31	24.73	85.5	8302	0.065	7.34E-05	0.131	0.767	86.20	11.74	2.98	C	1.06	17.93
126.8	8058	0.364	1.11E-04	0.126	0.769	86.20	2.61	3.07	C	1.20	46.97	94.3	8297	0.081	7.84E-05	0.131	0.767	86.20	9.85	2.98	C	1.11	13.13
164.7	8032	0.417	1.57E-04	0.126	0.770	86.20	2.29	3.08	C	1.40	13.67	104.7	8291	0.099	8.56E-05	0.131	0.767	86.20	8.41	2.99	C	1.17	11.74
192.6	8002	0.496	2.06E-04	0.125	0.771	86.20	1.94	3.11	C	1.48	11.55	129.7	8279	0.139	1.07E-04	0.130	0.768	86.20	6.26	3.00	C	1.29	11.75
201.7	7986	0.544	2.30E-04	0.124	0.771	86.20	1.78	3.12	C	1.49	10.20	157.1	8265	0.190	1.36E-04	0.130	0.769	86.20	4.76	3.01	C	1.40	11.27
205.8	7967	0.596	2.52E-04	0.124	0.772	86.20	1.62	3.13	C	1.47	9.08	161.5	8224	0.231	1.59E-04	0.129	0.769	86.20	3.98	3.03	C	1.35	9.89
207.1	7927	0.717	2.96E-04	0.123	0.773	86.20	1.36	3.17	C	1.39	16.73	182.7	8199	0.300	1.99E-04	0.128	0.769	86.20	3.12	3.05	C	1.38	8.59
81.2	8205	0.052	1.11E-04	0.130	0.766	86.20	13.95	2.98	C	0.90	39.50	206.2	8171	0.397	2.53E-04	0.128	0.771	86.20	2.40	3.07	C	1.40	7.42
111.7	8191	0.102	1.27E-04	0.130	0.767	86.20	8.18	2.99	C	1.09	16.01	218.2	8156	0.456	2.84E-04	0.127	0.771	86.20	2.10	3.09	C	1.41	7.17
128.8	8183	0.131	1.38E-04	0.130	0.768	86.20	6.63	3.00	C	1.19	16.54	227.2	8134	0.521	3.17E-04	0.127	0.772	86.20	1.85	3.10	C	1.40	7.25
144.4	8173	0.161	1.51E-04	0.130	0.768	86.20	5.51	3.00	C	1.26	16.55	245.9	8090	0.676	3.91E-04	0.126	0.774	86.20	1.44	3.14	C	1.37	7.88
168.8	8151	0.233	1.83E-04	0.129	0.769	86.20	3.95	3.02	C	1.34	15.12	81.1	8250	0.051	1.10E-04	0.131	0.767	86.20	13.97	2.97	C	0.90	40.01
180.1	8130	0.318	2.22E-04	0.129	0.770	86.20	2.96	3.05	C	1.30	24.51	112.1	8236	0.101	1.26E-04	0.131	0.767	86.20	8.22	2.99	C	1.10	16.05
126.9	8059	0.365	1.12E-04	0.126	0.769	86.20	2.60	3.07	C	1.20	46.58	129.4	8228	0.130	1.37E-04	0.130	0.768	86.20	6.67	2.99	C	1.20	16.54
164.7	8033	0.418	1.58E-04	0.126	0.770	86.20	2.28	3.08	C	1.39	13.59	145.3	8218	0.160	1.50E-04	0.130	0.768	86.20	5.54	3.00	C	1.27	16.50
192.7	8003	0.498	2.07E-04	0.125	0.771	86.20	1.93	3.11	C	1.48	11.51	169.9	8197	0.231	1.81E-04	0.130	0.769	86.20	3.98	3.02	C	1.35	15.10
201.8	7987	0.546	2.31E-04	0.124	0.771	86.20	1.77	3.12	C	1.49	10.16	180.9	8175	0.315	2.19E-04	0.129	0.770	86.20	2.98	3.04	C	1.31	24.62
206.0	7968	0.599	2.54E-04	0.124	0.772	86.20	1.62	3.13	C	1.46	9.05	126.2	8104	0.362	1.10E-04	0.127	0.770	86.20	2.62	3.07	C	1.20	47.83
207.2	7928	0.721	2.99E-04	0.123	0.773	86.20	1.35	3.17	C	1.38	16.60	165.0	8079	0.414	1.56E-04	0.126	0.770	86.20	2.31	3.08	C	1.40	13.82
80.7	8255	0.050	1.09E																				

187.9	7997	0.784	2.22E-04	0.124	0.775	86.20	1.24	3.17	C	1.50	17.21
90.3	8327	0.065	1.50E-04	0.133	0.769	86.20	11.71	2.97	C	0.85	43.83
133.0	8308	0.135	1.81E-04	0.133	0.770	86.20	6.42	2.99	C	1.09	17.00
157.4	8298	0.176	2.00E-04	0.133	0.770	86.20	5.08	3.00	C	1.21	17.54
179.3	8284	0.221	2.22E-04	0.132	0.771	86.20	4.13	3.01	C	1.30	17.70
211.8	8253	0.328	2.74E-04	0.132	0.772	86.20	2.87	3.04	C	1.37	16.01
224.2	8223	0.456	3.36E-04	0.131	0.774	86.20	2.10	3.07	C	1.31	25.45
115.8	8127	0.517	8.25E-05	0.128	0.773	86.20	1.86	3.10	C	1.25	47.14
151.6	8100	0.557	1.19E-04	0.127	0.773	86.20	1.73	3.11	C	1.48	14.97
176.7	8069	0.618	1.57E-04	0.126	0.773	86.20	1.57	3.13	C	1.59	12.79
184.2	8053	0.655	1.75E-04	0.125	0.774	86.20	1.48	3.14	C	1.60	11.40
187.7	8036	0.695	1.92E-04	0.125	0.774	86.20	1.40	3.15	C	1.58	10.23
187.7	8000	0.787	2.23E-04	0.124	0.775	86.20	1.24	3.17	C	1.50	17.19
90.3	8331	0.064	1.48E-04	0.133	0.769	86.20	11.81	2.97	C	0.85	44.36
132.8	8312	0.133	1.78E-04	0.133	0.770	86.20	6.50	2.99	C	1.09	17.13
157.0	8303	0.173	1.96E-04	0.133	0.770	86.20	5.15	3.00	C	1.21	17.67
178.7	8289	0.218	2.18E-04	0.132	0.771	86.20	4.20	3.01	C	1.30	17.78
210.4	8258	0.322	2.68E-04	0.132	0.772	86.20	2.92	3.04	C	1.38	16.07
221.9	8229	0.447	3.28E-04	0.131	0.774	86.20	2.14	3.07	C	1.32	25.64
113.5	8133	0.507	8.08E-05	0.128	0.773	86.20	1.90	3.10	C	1.22	51.91
150.7	8107	0.546	1.18E-04	0.127	0.773	86.20	1.77	3.11	C	1.47	15.56
176.4	8076	0.606	1.55E-04	0.126	0.773	86.20	1.60	3.13	C	1.58	13.20
183.9	8061	0.643	1.73E-04	0.125	0.774	86.20	1.51	3.14	C	1.59	11.74
187.0	8043	0.683	1.90E-04	0.125	0.774	86.20	1.42	3.15	C	1.57	10.54
185.9	8007	0.774	2.20E-04	0.124	0.775	86.20	1.26	3.17	C	1.49	18.59
88.8	8373	0.062	1.46E-04	0.134	0.769	86.20	12.03	2.96	C	0.84	43.30
130.6	8355	0.131	1.76E-04	0.133	0.770	86.20	6.60	2.98	C	1.08	16.75
154.3	8345	0.171	1.95E-04	0.133	0.770	86.20	5.22	2.99	C	1.20	17.24
175.7	8331	0.214	2.16E-04	0.133	0.771	86.20	4.25	3.01	C	1.28	17.38
207.5	8302	0.318	2.66E-04	0.132	0.772	86.20	2.95	3.03	C	1.36	15.72
219.8	8272	0.443	3.26E-04	0.132	0.774	86.20	2.16	3.06	C	1.30	25.01
110.7	8177	0.501	7.91E-05	0.129	0.773	86.20	1.92	3.09	C	1.19	49.20
146.9	8151	0.540	1.15E-04	0.128	0.773	86.20	1.78	3.10	C	1.44	15.08
172.5	8121	0.599	1.52E-04	0.127	0.774	86.20	1.61	3.12	C	1.55	12.87
180.3	8105	0.635	1.69E-04	0.126	0.774	86.20	1.53	3.13	C	1.57	11.48
183.8	8088	0.674	1.85E-04	0.126	0.774	86.20	1.44	3.14	C	1.55	10.33
183.7	8051	0.763	2.16E-04	0.124	0.775	86.20	1.28	3.17	C	1.48	17.72
89.2	8417	0.062	1.46E-04	0.134	0.769	86.20	12.08	2.96	C	0.85	43.49
131.1	8399	0.130	1.76E-04	0.134	0.770	86.20	6.62	2.98	C	1.08	16.80
155.0	8389	0.170	1.94E-04	0.134	0.771	86.20	5.24	2.99	C	1.20	17.32
176.5	8375	0.214	2.15E-04	0.134	0.771	86.20	4.26	3.00	C	1.29	17.43
208.4	8345	0.317	2.66E-04	0.133	0.773	86.20	2.96	3.03	C	1.36	15.76
220.7	8315	0.441	3.26E-04	0.132	0.775	86.20	2.16	3.06	C	1.30	25.07
111.0	8222	0.500	7.85E-05	0.129	0.773	86.20	1.92	3.09	C	1.20	48.84
147.1	8195	0.539	1.14E-04	0.128	0.774	86.20	1.79	3.10	C	1.44	15.09
172.3	8165	0.597	1.50E-04	0.127	0.774	86.20	1.62	3.12	C	1.55	12.86
179.9	8150	0.632	1.68E-04	0.127	0.774	86.20	1.53	3.13	C	1.56	11.47
183.2	8132	0.671	1.84E-04	0.126	0.775	86.20	1.45	3.14	C	1.55	10.32
182.7	8096	0.759	2.13E-04	0.125	0.775	86.20	1.28	3.16	C	1.47	17.68
90.1	8395	0.063	1.47E-04	0.134	0.769	86.20	11.90	2.96	C	0.85	43.73
132.9	8376	0.132	1.77E-04	0.134	0.770	86.20	6.54	2.98	C	1.09	16.96
157.2	8366	0.172	1.96E-04	0.134	0.771	86.20	5.18	2.99	C	1.21	17.50
178.9	8352	0.216	2.17E-04	0.133	0.771	86.20	4.21	3.00	C	1.30	17.63
210.9	8322	0.320	2.68E-04	0.133	0.773	86.20	2.93	3.03	C	1.37	15.94
222.5	8292	0.446	3.28E-04	0.132	0.775	86.20	2.14	3.06	C	1.31	25.32
114.2	8198	0.505	7.97E-05	0.129	0.773	86.20	1.90	3.09	C	1.23	49.39
150.6	8172	0.544	1.16E-04	0.128	0.773	86.20	1.77	3.10	C	1.47	15.31
175.9	8141	0.603	1.53E-04	0.127	0.774	86.20	1.60	3.12	C	1.58	13.01
183.4	8126	0.639	1.70E-04	0.127	0.774	86.20	1.52	3.13	C	1.59	11.61
186.7	8108	0.678	1.86E-04	0.126	0.774	86.20	1.43	3.14	C	1.57	10.43
186.1	8072	0.768	2.17E-04	0.125	0.775	86.20	1.27	3.17	C	1.49	17.81
90.6	8378	0.064	1.48E-04	0.134	0.769	86.20	11.79	2.97	C	0.85	43.81
133.4	8359	0.133	1.78E-04	0.133	0.770	86.20	6.49	2.98	C	1.09	17.06
157.8	8350	0.174	1.97E-04	0.133	0.770	86.20	5.14	2.99	C	1.21	17.63
179.6	8335	0.218	2.18E-04	0.133	0.771	86.20	4.19	3.01	C	1.30	17.77
211.8	8305	0.323	2.69E-04	0.132	0.772	86.20	2.91	3.03	C	1.38	16.06
223.8	8275	0.449	3.30E-04	0.132	0.774	86.20	2.13	3.07	C	1.32	25.54
115.4	8179	0.508	8.15E-05	0.128	0.773	86.20	1.89	3.09	C	1.24	48.67
151.9	8152	0.548	1.18E-04	0.127	0.773	86.20	1.76	3.11	C	1.48	15.14
177.4	8122	0.608	1.55E-04	0.126	0.774	86.20	1.59	3.12	C	1.59	12.88
185.1	8106	0.645	1.73E-04	0.126	0.774	86.20	1.50	3.13	C	1.60	11.49
188.6	8088	0.685	1.90E-04	0.125	0.774	86.20	1.42	3.15	C	1.58	10.30
188.4	8052	0.776	2.22E-04	0.124	0.775	86.20	1.26	3.17	C	1.50	17.54
73.6	8298	0.035	7.05E-05	0.131	0.767	86.20	18.09	2.97	C	1.00	24.83
84.9	8287	0.066	7.36E-05	0.131	0.767	86.20	11.66	2.98	C	1.05	18.01
93.5	8282	0.082	7.86E-05	0.131	0.767	86.20	9.79	2.98	C	1.10	13.10
103.7	8276	0.099	8.58E-05	0.130	0.767	86.20	8.36	2.99	C	1.16	11.67
128.5	8264	0.140	1.07E-04	0.130	0.768	86.20	6.23	3.00	C	1.28	11.68
156.3	8250	0.191	1.37E-04	0.130	0.769	86.20	4.74	3.01	C	1.40	11.20
160.8	8208	0.232	1.60E-04	0.129	0.768	86.20	3.97	3.03	C	1.34	9.84
182.8	8183	0.302	2.00E-04	0.128	0.769	86.20	3.11	3.05	C	1.38	8.59
207.6	8154	0.399	2.54E-04	0.127	0.771	86.20	2.39	3.07	C	1.41	7.46
220.5	8140	0.458	2.86E-04	0.127	0.771	86.20	2.09	3.09	C	1.42	7.22
230.4	8118	0.524	3.19E-04	0.127	0.772	86.20	1.84	3.11	C	1.41	7.32
251.1	8074	0.680	3.94E-04	0.125	0.774	86.20	1.43	3.14	C	1.39	8.00
90.5	8352	0.064	1.49E-04	0.133	0.769	86.20	11.76	2.97	C	0.85	43.88
133.4	8334	0.134	1.79E-04	0.133	0.770	86.20	6.47	2.98	C	1.09	17.04
157.9	8324	0.174	1.98E-04	0.133	0.770	86.20	5.12	3.00	C	1.22	17.62
179.8	8310	0.219	2.19E-04	0.133	0.771	86.20	4.17	3.01	C	1.30	17.75
211.9	8280	0.324	2.71E-04	0.132	0.772	86.20	2.90	3.04	C	1.38	16.02
223.5	8250	0.451	3.32E-04	0.132	0.774	86.20	2.12	3.07	C	1.32	25.45
116.6	8155	0.511	8.23E-05	0.128	0.773	86.20	1.88	3.10	C	1.25	49.03

153.4	8128	0.551	1.19E-04	0.127	0.773	86.20	1.75	3.11	C	1.49	15.18
178.9	8097	0.612	1.57E-04	0.126	0.774	86.20	1.58	3.13	C	1.60	12.92
186.5	8081	0.649	1.75E-04	0.126	0.774	86.20	1.49	3.14	C	1.61	11.50
189.9	8063	0.689	1.92E-04	0.125	0.774	86.20	1.41	3.15	C	1.59	10.33
189.5	8027	0.782	2.23E-04	0.124	0.775	86.20	1.25	3.17	C	1.50	17.68
73.0	8287	0.035	7.04E-05	0.131	0.766	86.20	18.02	2.97	C	1.00	25.61
84.9	8276	0.066	7.38E-05	0.130	0.767	86.20	11.63	2.98	C	1.05	18.44
93.8	8271	0.082	7.90E-05	0.130	0.767	86.20	9.76	2.98	C	1.10	13.22
104.2	8265	0.100	8.63E-05	0.130	0.767	86.20	8.34	2.99	C	1.16	11.69
129.4	8252	0.141	1.08E-04	0.130	0.768	86.20	6.21	3.00	C	1.29	11.69
157.3	8239	0.192	1.38E-04	0.130	0.769	86.20	4.72	3.01	C	1.40	11.20
161.6	8196	0.233	1.61E-04	0.128	0.768	86.					

340.8	10666	0.138	1.75E-04	0.193	0.808	75.57	5.87	2.39	C	2.58	28.61	436.4	10569	0.575	4.42E-04	0.188	0.806	75.57	1.65	2.42	C	1.94	12.69
385.3	10651	0.228	2.36E-04	0.192	0.808	75.57	3.85	2.40	C	2.45	23.07	164.1	10706	0.012	4.79E-05	0.191	0.807	75.57	22.75	2.39	C	2.63	52.04
367.8	10633	0.345	3.11E-04	0.192	0.808	75.57	2.65	2.40	C	1.99	27.78	129.8	10701	0.030	3.55E-05	0.191	0.807	75.57	16.20	2.39	C	2.14	47.72
226.8	10577	0.398	6.11E-05	0.190	0.807	75.57	2.32	2.41	C	2.55	88.18	128.2	10698	0.038	3.51E-05	0.191	0.807	75.57	14.39	2.39	C	2.06	41.42
312.5	10560	0.431	1.00E-04	0.189	0.807	75.57	2.16	2.41	C	3.00	32.91	139.0	10696	0.046	3.86E-05	0.191	0.807	75.57	12.91	2.39	C	2.11	36.42
353.5	10540	0.485	1.48E-04	0.189	0.807	75.57	1.93	2.42	C	2.89	25.02	184.4	10692	0.066	5.72E-05	0.191	0.807	75.57	10.22	2.39	C	2.38	32.74
358.9	10529	0.522	1.74E-04	0.188	0.806	75.57	1.81	2.42	C	2.73	21.01	248.2	10687	0.097	9.03E-05	0.190	0.807	75.57	7.76	2.39	C	2.60	27.98
354.8	10515	0.563	2.00E-04	0.188	0.806	75.57	1.68	2.42	C	2.52	17.66	275.3	10672	0.126	1.19E-04	0.190	0.807	75.57	6.34	2.40	C	2.52	23.33
338.7	10485	0.664	2.57E-04	0.187	0.806	75.57	1.44	2.43	C	2.12	20.87	327.3	10661	0.183	1.71E-04	0.190	0.807	75.57	4.66	2.40	C	2.47	18.69
130.8	10695	0.023	9.86E-05	0.193	0.808	75.57	18.28	2.38	C	1.45	62.59	377.1	10646	0.273	2.44E-04	0.189	0.807	75.57	3.28	2.40	C	2.35	14.79
232.0	10687	0.072	1.29E-04	0.193	0.808	75.57	9.62	2.39	C	2.11	27.16	399.0	10638	0.332	2.87E-04	0.189	0.807	75.57	2.75	2.41	C	2.27	13.54
293.3	10682	0.103	1.50E-04	0.193	0.808	75.57	7.42	2.39	C	2.43	28.24	412.2	10622	0.400	3.33E-04	0.189	0.807	75.57	2.32	2.41	C	2.15	12.79
344.1	10675	0.138	1.75E-04	0.193	0.808	75.57	5.88	2.39	C	2.60	28.04	435.5	10586	0.570	4.38E-04	0.188	0.806	75.57	1.66	2.42	C	1.94	12.58
386.8	10660	0.227	2.36E-04	0.192	0.808	75.57	3.85	2.40	C	2.46	22.60	163.8	10660	0.013	4.74E-05	0.190	0.807	75.57	22.60	2.39	C	2.64	51.91
365.7	10642	0.344	3.11E-04	0.192	0.808	75.57	2.66	2.40	C	1.98	26.99	129.5	10655	0.030	3.52E-05	0.190	0.807	75.57	16.17	2.39	C	2.15	47.51
230.5	10584	0.398	6.26E-05	0.190	0.807	75.57	2.33	2.41	C	2.57	83.32	127.8	10653	0.038	3.48E-05	0.190	0.807	75.57	14.38	2.39	C	2.06	41.40
309.4	10568	0.431	1.01E-04	0.189	0.807	75.57	2.16	2.41	C	2.96	32.26	137.4	10651	0.046	3.83E-05	0.190	0.807	75.57	12.91	2.39	C	2.11	36.60
348.1	10548	0.486	1.48E-04	0.189	0.807	75.57	1.93	2.42	C	2.85	24.66	182.9	10647	0.066	5.65E-05	0.190	0.807	75.57	10.24	2.39	C	2.38	32.91
353.9	10537	0.522	1.74E-04	0.188	0.806	75.57	1.81	2.42	C	2.69	20.65	245.9	10642	0.097	8.90E-05	0.190	0.807	75.57	7.80	2.39	C	2.60	28.12
351.0	10523	0.563	2.01E-04	0.188	0.806	75.57	1.68	2.42	C	2.49	17.39	272.0	10626	0.125	1.17E-04	0.189	0.807	75.57	6.38	2.40	C	2.51	23.43
337.8	10492	0.665	2.58E-04	0.187	0.806	75.57	1.44	2.43	C	2.11	20.25	323.9	10615	0.181	1.68E-04	0.189	0.806	75.57	4.71	2.40	C	2.48	18.77
131.0	10676	0.023	9.82E-05	0.193	0.808	75.57	18.18	2.39	C	1.46	62.30	373.8	10601	0.270	2.40E-04	0.189	0.806	75.57	3.32	2.40	C	2.36	14.70
230.2	10668	0.072	1.28E-04	0.193	0.808	75.57	9.61	2.39	C	2.11	26.99	396.0	10593	0.327	2.82E-04	0.188	0.806	75.57	2.79	2.41	C	2.28	13.69
290.3	10663	0.103	1.49E-04	0.192	0.808	75.57	7.43	2.39	C	2.41	27.92	409.6	10578	0.394	3.27E-04	0.188	0.806	75.57	2.35	2.41	C	2.17	12.94
340.6	10657	0.138	1.74E-04	0.192	0.808	75.57	5.89	2.39	C	2.58	27.81	433.6	10543	0.561	4.30E-04	0.187	0.806	75.57	1.69	2.42	C	1.96	12.73
385.5	10641	0.227	2.35E-04	0.192	0.808	75.57	3.86	2.40	C	2.46	22.51	167.5	10669	0.012	4.70E-05	0.190	0.807	75.57	22.88	2.39	C	2.72	53.63
367.9	10624	0.343	3.10E-04	0.192	0.808	75.57	2.67	2.40	C	2.00	26.94	131.9	10664	0.030	3.51E-05	0.190	0.807	75.57	16.34	2.39	C	2.19	48.40
230.0	10568	0.397	6.15E-05	0.190	0.807	75.57	2.33	2.41	C	2.58	88.94	130.0	10662	0.037	3.49E-05	0.190	0.807	75.57	14.52	2.39	C	2.10	41.96
317.4	10552	0.429	1.01E-04	0.189	0.807	75.57	2.17	2.41	C	3.04	33.36	139.4	10660	0.045	3.84E-05	0.190	0.807	75.57	13.02	2.39	C	2.14	37.11
357.7	10532	0.484	1.48E-04	0.188	0.806	75.57	1.94	2.42	C	2.93	25.49	184.2	10656	0.066	5.67E-05	0.190	0.807	75.57	10.30	2.39	C	2.39	33.10
362.2	10521	0.520	1.74E-04	0.188	0.806	75.57	1.81	2.42	C	2.75	21.26	246.2	10652	0.096	8.92E-05	0.190	0.807	75.57	7.83	2.39	C	2.60	28.31
357.3	10507	0.562	2.01E-04	0.188	0.806	75.57	1.69	2.42	C	2.54	17.76	271.4	10636	0.125	1.17E-04	0.189	0.807	75.57	6.40	2.40	C	2.50	23.59
339.6	10477	0.663	2.58E-04	0.187	0.806	75.57	1.44	2.43	C	2.12	21.06	322.5	10625	0.181	1.68E-04	0.189	0.807	75.57	4.72	2.40	C	2.46	18.89
131.5	10675	0.023	9.72E-05	0.192	0.808	75.57	18.14	2.39	C	1.47	63.76	372.1	10611	0.269	2.39E-04	0.189	0.806	75.57	3.33	2.40	C	2.35	14.93
230.7	10667	0.072	1.27E-04	0.192	0.808	75.57	9.65	2.39	C	2.12	27.52	394.2	10602	0.327	2.81E-04	0.189	0.806	75.57	2.79	2.41	C	2.27	13.72
290.2	10663	0.102	1.47E-04	0.192	0.808	75.57	7.47	2.39	C	2.43	28.51	407.8	10587	0.393	3.26E-04	0.188	0.806	75.57	2.35	2.41	C	2.16	13.00
339.4	10656	0.136	1.71E-04	0.192	0.808	75.57	5.93	2.39	C	2.60	28.27	431.7	10552	0.560	4.29E-04	0.187	0.806	75.57	1.69	2.42	C	1.96	12.87
381.6	10641	0.224	2.30E-04	0.192	0.808	75.57	3.91	2.40	C	2.46	22.86	163.9	10655	0.012	4.72E-05	0.191	0.807	75.57	22.68	2.39	C	2.65	52.38
362.1	10623	0.337	3.02E-04	0.191	0.808	75.57	2.71	2.40	C	2.00	27.55	131.7	10650	0.030	3.53E-05	0.190	0.807	75.57	16.22	2.39	C	2.18	48.50
226.0	10569	0.390	6.03E-05	0.189	0.807	75.57	2.37	2.41	C	2.54	90.89	130.9	10648	0.038	3.50E-05	0.190	0.807	75.57	14.41	2.39	C	2.11	42.21
307.8	10553	0.422	9.95E-05	0.189	0.807	75.57	2.21	2.41	C	2.96	32.96	141.3	10646	0.046	3.86E-05	0.190	0.807	75.57	12.93	2.39	C	2.16	37.32
346.7	10533	0.476	1.46E-04	0.188	0.806	75.57	1.97	2.42	C	2.85	25.09	188.2	10642	0.066	5.71E-05	0.190	0.807	75.57	10.23	2.39	C	2.44	33.52
352.2	10522	0.512	1.72E-04	0.188	0.806	75.57	1.84	2.42	C	2.69	21.07	251.3	10636	0.097	8.98E-05	0.190	0.807	75.57	7.78	2.39	C	2.65	28.58
348.7	10508	0.552	1.97E-04	0.188	0.806	75.57	1.71	2.42	C	2.50	17.71	279.4	10623	0.126	1.18E-04	0.190	0.807	75.57	6.36	2.40	C	2.57	24.06
334.2	10478	0.652	2.52E-04	0.187	0.806	75.57	1.46	2.43	C	2.11	21.43	329.7	10612	0.182	1.69E-04	0.189	0.807	75.57	4.69	2.40	C	2.51	19.09
130.4	10670	0.023	9.73E-05	0.192	0.808	75.57	18.03	2.39	C	1.46	62.98	377.2	10598	0.271	2.41E-04	0.189	0.807	75.57	3.31	2.40	C	2.37	14.99
227.1	10662	0.072	1.27E-04	0.192	0.808	75.57	9.61	2.39	C	2.09	27.01	397.9	10589	0.329	2.83E-04	0.189	0.807	75.57	2.77	2.41	C	2.29	13.71
284.7	10657	0.102	1.48E-04	0.192	0.808	75.57	7.44	2.39	C	2.38	27.91	410.6	10574	0.396	3.29E-04	0.189	0.806	75.57	2.34	2.41	C	2.17	12.97
332.3	10650	0.137	1.72E-04	0.192	0.808	75.57	5.91	2.39	C	2.54	27.53	432.7	10540	0.564	4.32E-04	0.188	0.806	75.57	1.68	2.42	C	1.95	12.71
374.1	10635	0.225	2.31E-04	0.191	0.808	75.57	3.89	2.40	C	2.41	22.34	165.1	10613	0.012	4.75E-05	0.191	0.807	75.57	22.87	2.39	C	2.68	53.50
356.7	10618	0.339	3.03E-04	0.191	0.808	75.57	2.70	2.40	C	1.97	27.03	131.4	10608	0.030	3.57E-05	0.191	0.807	75.57	16.27	2.39	C	2.18	48.73
227.1	10562	0.392	6.18E-05	0.189	0.807	75.57	2.36	2.41	C	2.54	85.63	130.3	10606	0.038	3.56E-05	0.191	0.807	75.57	14.43	2.39	C	2.10	41.87
306.9	10545	0.424	1.00E-04	0.188	0.806	75.57	2.20	2.41	C	2.94													

375.5	12306	0.188	1.83E-04	0.191	0.808	75.57	4.55	2.40	C	2.48	17.80	299.4	12285	0.079	1.05E-04	0.193	0.809	75.57	9.00	2.39	C	2.72	28.81
436.7	12287	0.286	2.66E-04	0.191	0.808	75.57	3.15	2.40	C	2.35	13.81	320.1	12274	0.132	1.37E-04	0.193	0.809	75.57	6.11	2.39	C	2.49	23.14
463.5	12276	0.350	3.16E-04	0.191	0.808	75.57	2.62	2.41	C	2.27	12.67	292.7	12261	0.198	1.75E-04	0.193	0.808	75.57	4.34	2.39	C	1.98	27.41
479.0	12254	0.425	3.69E-04	0.190	0.807	75.57	2.19	2.41	C	2.15	12.10	281.6	12261	0.236	9.34E-05	0.191	0.808	75.57	3.73	2.40	C	2.48	56.10
506.3	12204	0.615	4.91E-04	0.189	0.807	75.57	1.55	2.42	C	1.92	12.10	371.7	12197	0.282	1.41E-04	0.191	0.808	75.57	3.18	2.40	C	2.76	24.84
126.3	12328	0.005	6.29E-05	0.194	0.809	75.57	26.55	2.38	C	1.68	64.50	430.8	12173	0.360	2.13E-04	0.190	0.807	75.57	2.55	2.41	C	2.63	19.06
210.8	12320	0.036	7.86E-05	0.194	0.809	75.57	14.58	2.38	C	2.30	28.84	445.5	12160	0.412	2.56E-04	0.190	0.807	75.57	2.25	2.41	C	2.47	15.86
256.7	12316	0.055	8.94E-05	0.194	0.809	75.57	11.48	2.39	C	2.57	29.64	446.5	12139	0.473	3.04E-04	0.190	0.807	75.57	1.98	2.41	C	2.26	13.06
291.0	12311	0.076	1.02E-04	0.193	0.809	75.57	9.27	2.39	C	2.68	28.73	440.7	12092	0.632	4.15E-04	0.189	0.806	75.57	1.51	2.43	C	1.87	13.91
309.2	12299	0.127	1.32E-04	0.193	0.809	75.57	6.29	2.39	C	2.44	22.96	127.2	12313	0.007	6.36E-05	0.194	0.809	75.57	25.48	2.38	C	1.67	64.65
282.1	12286	0.191	1.70E-04	0.193	0.809	75.57	4.48	2.39	C	1.94	27.53	213.9	12305	0.038	8.02E-05	0.194	0.809	75.57	14.18	2.38	C	2.31	28.73
267.2	12245	0.227	8.66E-05	0.192	0.808	75.57	3.85	2.40	C	2.42	61.34	261.4	12301	0.057	9.13E-05	0.193	0.809	75.57	11.18	2.39	C	2.59	29.33
357.4	12227	0.271	1.34E-04	0.191	0.808	75.57	3.30	2.40	C	2.72	25.39	297.1	12295	0.078	1.04E-04	0.193	0.809	75.57	9.03	2.39	C	2.70	28.59
412.8	12204	0.344	2.00E-04	0.191	0.807	75.57	2.66	2.41	C	2.60	19.46	316.7	12283	0.131	1.36E-04	0.193	0.809	75.57	6.13	2.39	C	2.47	22.86
425.4	12191	0.393	2.40E-04	0.190	0.807	75.57	2.35	2.41	C	2.44	16.20	289.5	12270	0.197	1.74E-04	0.193	0.808	75.57	4.36	2.39	C	1.96	27.19
424.4	12170	0.450	2.83E-04	0.190	0.807	75.57	2.07	2.41	C	2.23	13.34	278.0	12225	0.235	9.21E-05	0.191	0.808	75.57	3.75	2.40	C	2.46	56.78
415.1	12124	0.597	3.82E-04	0.189	0.807	75.57	1.59	2.42	C	1.85	14.75	369.2	12206	0.280	1.39E-04	0.191	0.808	75.57	3.20	2.40	C	2.76	25.24
127.1	12325	0.005	6.29E-05	0.194	0.809	75.57	26.48	2.38	C	1.69	64.34	427.2	12182	0.356	2.10E-04	0.190	0.807	75.57	2.58	2.41	C	2.63	19.36
211.4	12317	0.036	7.86E-05	0.194	0.809	75.57	14.56	2.38	C	2.31	28.96	440.7	12169	0.408	2.52E-04	0.190	0.807	75.57	2.27	2.41	C	2.46	16.09
257.3	12313	0.055	8.94E-05	0.194	0.809	75.57	11.46	2.39	C	2.57	29.65	440.7	12148	0.469	2.99E-04	0.190	0.807	75.57	2.00	2.41	C	2.25	13.24
291.8	12308	0.076	1.02E-04	0.194	0.809	75.57	9.25	2.39	C	2.69	28.75	432.7	12102	0.625	4.08E-04	0.189	0.806	75.57	1.52	2.42	C	1.85	14.16
311.0	12297	0.127	1.33E-04	0.193	0.809	75.57	6.28	2.39	C	2.45	22.98	191.2	12285	0.015	5.29E-05	0.192	0.808	75.57	21.21	2.39	C	2.64	55.80
284.8	12284	0.192	1.70E-04	0.193	0.809	75.57	4.47	2.39	C	1.95	27.51	139.7	12279	0.034	3.53E-05	0.192	0.808	75.57	15.18	2.39	C	2.06	53.97
271.1	12241	0.228	8.81E-05	0.192	0.808	75.57	3.84	2.40	C	2.44	59.11	133.3	12276	0.041	3.34E-05	0.192	0.808	75.57	13.62	2.39	C	1.94	47.11
360.8	12223	0.272	1.34E-04	0.191	0.808	75.57	3.29	2.40	C	2.74	25.50	141.9	12274	0.049	3.62E-05	0.192	0.808	75.57	12.35	2.39	C	1.97	39.06
416.4	12200	0.345	2.01E-04	0.191	0.807	75.57	2.65	2.41	C	2.61	19.65	196.2	12268	0.068	5.55E-05	0.191	0.808	75.57	9.96	2.39	C	2.31	34.03
429.0	12187	0.394	2.41E-04	0.190	0.807	75.57	2.35	2.41	C	2.45	16.29	275.2	12262	0.099	9.22E-05	0.191	0.808	75.57	7.61	2.39	C	2.59	28.12
428.0	12167	0.452	2.85E-04	0.190	0.807	75.57	2.07	2.41	C	2.24	13.41	305.8	12239	0.130	1.24E-04	0.191	0.807	75.57	6.20	2.39	C	2.49	22.82
418.6	12121	0.601	3.86E-04	0.189	0.807	75.57	1.58	2.42	C	1.85	14.54	368.6	12223	0.190	1.84E-04	0.190	0.807	75.57	4.51	2.40	C	2.44	17.59
127.9	12339	0.006	6.27E-05	0.194	0.809	75.57	26.40	2.38	C	1.70	64.62	428.2	12203	0.288	2.68E-04	0.190	0.807	75.57	3.13	2.40	C	2.31	13.62
212.9	12331	0.036	7.83E-05	0.194	0.809	75.57	14.56	2.38	C	2.33	29.17	454.2	12191	0.353	3.18E-04	0.190	0.807	75.57	2.60	2.41	C	2.23	12.50
259.2	12327	0.055	8.90E-05	0.194	0.809	75.57	11.47	2.39	C	2.60	29.89	469.7	12169	0.429	3.71E-04	0.189	0.807	75.57	2.17	2.41	C	2.11	12.01
294.0	12322	0.076	1.01E-04	0.194	0.809	75.57	9.27	2.39	C	2.71	29.17	496.9	12120	0.619	4.94E-04	0.188	0.806	75.57	1.54	2.43	C	1.88	12.04
313.1	12310	0.126	1.32E-04	0.193	0.809	75.57	6.30	2.39	C	2.47	23.26	128.7	12317	0.007	6.33E-05	0.194	0.809	75.57	25.70	2.38	C	1.69	65.59
286.6	12298	0.191	1.69E-04	0.193	0.809	75.57	4.48	2.39	C	1.97	27.84	214.6	12309	0.038	7.97E-05	0.193	0.809	75.57	14.25	2.38	C	2.33	29.10
273.4	12256	0.227	8.67E-05	0.192	0.808	75.57	3.86	2.40	C	2.48	60.83	261.3	12305	0.057	9.08E-05	0.193	0.809	75.57	11.24	2.39	C	2.59	29.75
366.2	12239	0.270	1.33E-04	0.191	0.808	75.57	3.31	2.40	C	2.79	25.75	296.8	12300	0.078	1.04E-04	0.193	0.809	75.57	9.08	2.39	C	2.71	28.86
421.8	12216	0.343	2.00E-04	0.191	0.807	75.57	2.67	2.41	C	2.65	19.73	317.7	12289	0.130	1.35E-04	0.193	0.809	75.57	6.17	2.39	C	2.48	23.18
433.7	12204	0.392	2.39E-04	0.190	0.807	75.57	2.36	2.41	C	2.49	16.39	292.1	12276	0.195	1.73E-04	0.193	0.808	75.57	4.39	2.39	C	1.99	27.79
431.6	12184	0.449	2.82E-04	0.190	0.807	75.57	2.08	2.41	C	2.27	13.47	276.1	12232	0.233	9.00E-05	0.191	0.808	75.57	3.78	2.40	C	2.47	58.60
420.1	12138	0.596	3.80E-04	0.189	0.807	75.57	1.59	2.42	C	1.87	14.71	369.6	12213	0.278	1.37E-04	0.191	0.808	75.57	3.23	2.40	C	2.78	25.34
126.6	12321	0.006	6.27E-05	0.193	0.809	75.57	26.06	2.38	C	1.68	64.45	428.9	12190	0.353	2.07E-04	0.190	0.807	75.57	2.60	2.41	C	2.66	19.51
211.4	12313	0.037	7.83E-05	0.193	0.809	75.57	14.48	2.38	C	2.31	28.67	442.7	12177	0.403	2.49E-04	0.190	0.807	75.57	2.30	2.41	C	2.49	16.18
257.6	12309	0.055	8.90E-05	0.193	0.809	75.57	11.43	2.39	C	2.58	29.44	442.3	12156	0.463	2.94E-04	0.190	0.807	75.57	2.02	2.41	C	2.28	13.33
292.1	12304	0.076	1.01E-04	0.193	0.809	75.57	9.24	2.39	C	2.70	28.49	433.5	12110	0.616	4.00E-04	0.189	0.807	75.57	1.54	2.42	C	1.88	14.34
310.2	12293	0.127	1.31E-04	0.193	0.808	75.57	6.29	2.39	C	2.46	22.88	132.1	12341	0.013	8.70E-05	0.195	0.809	75.57	21.92	2.38	C	1.45	62.69
282.5	12281	0.190	1.68E-04	0.193	0.808	75.57	4.49	2.39	C	1.95	27.41	236.0	12332	0.057	1.14E-04	0.194	0.809	75.57	11.21	2.38	C	2.10	26.66
269.2	12238	0.227	8.66E-05	0.191	0.808	75.57	3.87	2.40	C	2.44	59.97	296.2	12326	0.084	1.33E-04	0.194	0.809	75.57	8.59	2.39	C	2.39	27.48
360.6	12220	0.270	1.33E-04	0.191	0.808	75.57	3.32	2.40	C	2.76	25.77	342.4	12319	0.115	1.54E-04	0.194	0.809	75.57	6.77	2.39	C	2.52	26.92
416.7	12198	0.342	1.98E-04	0.190	0.807	75.57	2.68	2.41	C	2.63	19.79	370.4	12302	0.194	2.07E-04	0.194	0.809	75.57	4.41	2.39	C	2.30	20.99
429.1	12186	0.390	2.38E-04	0.190	0.807	75.57	2.37	2.41	C	2.47	16.45	340.0	12282	0.296	2.72E-04	0.193	0.809	75.57	3.04	2.40	C	1.81	25.08
427.4	12165	0.447	2.81E-04	0.190	0.807	75.57	2.09	2.41	C	2.26	13.53	238.5	12211	0.345	6.26E-05	0.191	0.808	75.57	2.65	2.40	C	2.37	78.95
416.6	12120	0.593	3.79E-04	0.189	0.806	75.57	1.60	2.42	C	1.86													

369.6	12072	0.631	2.82E-04	0.187	0.806	75.57	1.51	2.43	C	1.99	17.84	377.6	12235	0.193	1.88E-04	0.191	0.808	75.57	4.45	2.40	C	2.48	17.77
134.1	12347	0.015	8.70E-05	0.193	0.809	75.57	21.25	2.38	C	1.46	62.79	437.4	12215	0.293	2.73E-04	0.191	0.807	75.57	3.08	2.40	C	2.33	13.75
237.0	12337	0.058	1.14E-04	0.193	0.808	75.57	11.04	2.39	C	2.11	26.98	463.6	12203	0.359	3.23E-04	0.191	0.807	75.57	2.56	2.41	C	2.25	12.61
296.2	12332	0.086	1.32E-04	0.193	0.808	75.57	8.49	2.39	C	2.39	27.79	478.7	12181	0.436	3.78E-04	0.190	0.807	75.57	2.14	2.41	C	2.12	12.08
341.3	12324	0.117	1.54E-04	0.193	0.808	75.57	6.71	2.39	C	2.52	27.16	505.4	12131	0.630	5.02E-04	0.189	0.807	75.57	1.51	2.42	C	1.89	12.18
369.4	12306	0.195	2.06E-04	0.192	0.808	75.57	4.40	2.39	C	2.30	21.27	197.1	12344	0.015	5.35E-05	0.193	0.808	75.57	21.27	2.38	C	2.70	56.58
340.8	12286	0.297	2.70E-04	0.192	0.808	75.57	3.04	2.40	C	1.82	25.52	142.2	12338	0.034	3.55E-05	0.193	0.808	75.57	15.17	2.39	C	2.09	54.89
238.3	12215	0.345	6.24E-05	0.190	0.807	75.57	2.65	2.41	C	2.37	81.40	135.1	12335	0.041	3.36E-05	0.193	0.808	75.57	13.61	2.39	C	1.96	48.00
338.2	12194	0.378	1.04E-04	0.189	0.807	75.57	2.44	2.41	C	2.86	29.95	143.4	12333	0.049	3.64E-05	0.193	0.808	75.57	12.34	2.39	C	1.99	39.41
387.3	12168	0.436	1.56E-04	0.188	0.806	75.57	2.14	2.41	C	2.78	22.67	198.0	12327	0.069	5.60E-05	0.192	0.808	75.57	9.94	2.39	C	2.32	34.23
393.8	12154	0.474	1.85E-04	0.188	0.806	75.57	1.98	2.42	C	2.62	18.78	277.9	12321	0.100	9.33E-05	0.192	0.808	75.57	7.58	2.39	C	2.60	28.05
387.9	12134	0.518	2.15E-04	0.188	0.806	75.57	1.82	2.42	C	2.40	15.60	309.5	12298	0.130	1.26E-04	0.192	0.808	75.57	6.16	2.39	C	2.49	22.89
368.2	12091	0.628	2.80E-04	0.186	0.805	75.57	1.52	2.43	C	1.99	18.02	373.2	12282	0.191	1.87E-04	0.191	0.808	75.57	4.48	2.40	C	2.45	17.54
133.6	12337	0.015	8.70E-05	0.193	0.809	75.57	21.25	2.38	C	1.46	62.86	433.9	12261	0.291	2.72E-04	0.191	0.808	75.57	3.09	2.40	C	2.31	13.54
237.3	12327	0.058	1.14E-04	0.193	0.808	75.57	11.03	2.39	C	2.11	27.23	460.6	12249	0.357	3.23E-04	0.191	0.807	75.57	2.57	2.41	C	2.23	12.43
296.9	12322	0.086	1.32E-04	0.193	0.808	75.57	8.49	2.39	C	2.40	28.13	476.7	12227	0.434	3.77E-04	0.190	0.807	75.57	2.15	2.41	C	2.11	11.97
342.1	12314	0.117	1.54E-04	0.193	0.808	75.57	6.71	2.39	C	2.52	27.68	505.3	12177	0.628	5.02E-04	0.189	0.807	75.57	1.51	2.42	C	1.89	12.06
369.2	12296	0.195	2.06E-04	0.192	0.808	75.57	4.40	2.39	C	2.30	21.57	195.6	12351	0.015	5.33E-05	0.193	0.808	75.57	21.41	2.38	C	2.69	55.69
339.2	12276	0.297	2.70E-04	0.192	0.808	75.57	3.04	2.40	C	1.81	25.78	142.7	12345	0.033	3.54E-05	0.193	0.808	75.57	15.26	2.39	C	2.10	54.50
235.7	12203	0.345	6.24E-05	0.190	0.807	75.57	2.65	2.41	C	2.35	80.58	136.2	12342	0.041	3.34E-05	0.193	0.808	75.57	13.68	2.39	C	1.98	47.77
333.1	12182	0.378	1.04E-04	0.189	0.807	75.57	2.44	2.41	C	2.83	29.47	145.1	12339	0.048	3.62E-05	0.193	0.808	75.57	12.41	2.39	C	2.02	39.57
381.5	12155	0.435	1.55E-04	0.188	0.806	75.57	2.14	2.41	C	2.75	22.36	201.4	12334	0.068	5.57E-05	0.193	0.808	75.57	9.99	2.39	C	2.36	34.33
388.3	12141	0.473	1.84E-04	0.188	0.806	75.57	1.98	2.42	C	2.59	18.63	283.0	12327	0.099	9.28E-05	0.193	0.808	75.57	7.62	2.39	C	2.65	28.24
383.0	12121	0.517	2.14E-04	0.187	0.806	75.57	1.82	2.42	C	2.38	15.43	316.0	12305	0.129	1.26E-04	0.192	0.808	75.57	6.19	2.39	C	2.55	23.10
364.4	12078	0.627	2.79E-04	0.186	0.805	75.57	1.52	2.43	C	1.97	17.89	380.8	12290	0.190	1.86E-04	0.192	0.808	75.57	4.50	2.40	C	2.50	17.75
134.3	12348	0.015	8.70E-05	0.193	0.809	75.57	21.31	2.38	C	1.47	62.56	441.8	12270	0.290	2.71E-04	0.191	0.808	75.57	3.11	2.40	C	2.36	13.71
239.1	12338	0.058	1.14E-04	0.193	0.808	75.57	11.05	2.39	C	2.13	27.13	468.3	12259	0.355	3.22E-04	0.191	0.808	75.57	2.58	2.41	C	2.27	12.55
299.3	12333	0.085	1.32E-04	0.193	0.808	75.57	8.50	2.39	C	2.42	28.14	483.8	12237	0.432	3.76E-04	0.191	0.807	75.57	2.16	2.41	C	2.14	12.01
344.8	12325	0.117	1.54E-04	0.193	0.808	75.57	6.72	2.39	C	2.54	27.55	511.0	12187	0.625	5.00E-04	0.190	0.807	75.57	1.52	2.42	C	1.91	11.96
371.1	12308	0.195	2.06E-04	0.192	0.808	75.57	4.40	2.39	C	2.31	21.45	190.1	12374	0.015	5.35E-05	0.193	0.808	75.57	21.18	2.38	C	2.60	55.22
339.9	12288	0.297	2.70E-04	0.192	0.808	75.57	3.04	2.40	C	1.82	25.53	137.5	12367	0.034	3.53E-05	0.193	0.808	75.57	15.14	2.39	C	2.02	54.02
237.9	12216	0.345	6.24E-05	0.190	0.807	75.57	2.65	2.41	C	2.37	79.86	130.8	12364	0.041	3.33E-05	0.193	0.808	75.57	13.59	2.39	C	1.89	47.25
335.6	12194	0.378	1.03E-04	0.189	0.807	75.57	2.44	2.41	C	2.85	29.76	139.3	12362	0.049	3.60E-05	0.192	0.808	75.57	12.33	2.39	C	1.93	38.84
384.7	12167	0.435	1.55E-04	0.188	0.806	75.57	2.14	2.41	C	2.77	22.54	193.9	12356	0.068	5.55E-05	0.192	0.808	75.57	9.95	2.39	C	2.27	33.69
391.8	12153	0.473	1.84E-04	0.188	0.806	75.57	1.98	2.42	C	2.61	18.77	273.9	12349	0.099	9.26E-05	0.192	0.808	75.57	7.61	2.39	C	2.56	27.75
386.9	12134	0.517	2.13E-04	0.187	0.806	75.57	1.82	2.42	C	2.40	15.59	305.4	12326	0.130	1.25E-04	0.192	0.808	75.57	6.18	2.39	C	2.46	22.55
369.0	12091	0.626	2.78E-04	0.186	0.805	75.57	1.52	2.43	C	2.00	17.91	369.3	12310	0.191	1.86E-04	0.191	0.808	75.57	4.49	2.40	C	2.42	17.37
133.0	12362	0.015	8.70E-05	0.193	0.809	75.57	21.35	2.38	C	1.45	62.39	429.9	12289	0.290	2.71E-04	0.191	0.807	75.57	3.11	2.40	C	2.29	13.37
236.7	12352	0.058	1.14E-04	0.193	0.809	75.57	11.07	2.39	C	2.11	26.92	456.4	12277	0.356	3.22E-04	0.191	0.807	75.57	2.58	2.41	C	2.21	12.29
296.8	12347	0.085	1.32E-04	0.193	0.808	75.57	8.51	2.39	C	2.40	27.73	472.3	12255	0.432	3.76E-04	0.190	0.807	75.57	2.15	2.41	C	2.09	11.86
342.7	12339	0.116	1.54E-04	0.193	0.808	75.57	6.73	2.39	C	2.53	27.22	500.3	12204	0.626	5.01E-04	0.189	0.807	75.57	1.52	2.42	C	1.87	11.86
370.8	12321	0.195	2.06E-04	0.192	0.808	75.57	4.41	2.39	C	2.30	21.31	185.1	12356	0.015	5.33E-05	0.193	0.808	75.57	21.21	2.38	C	2.54	54.30
340.7	12301	0.297	2.70E-04	0.192	0.808	75.57	3.04	2.40	C	1.82	25.39	135.2	12350	0.034	3.53E-05	0.193	0.808	75.57	15.16	2.39	C	1.98	53.36
236.7	12229	0.345	6.25E-05	0.190	0.807	75.57	2.65	2.41	C	2.35	79.52	129.2	12347	0.041	3.33E-05	0.193	0.808	75.57	13.61	2.39	C	1.87	46.64
331.9	12208	0.378	1.03E-04	0.189	0.807	75.57	2.44	2.41	C	2.82	29.38	138.1	12344	0.049	3.60E-05	0.192	0.808	75.57	12.35	2.39	C	1.92	38.33
380.7	12182	0.435	1.55E-04	0.188	0.806	75.57	2.14	2.41	C	2.74	22.31	193.3	12339	0.068	5.54E-05	0.192	0.808	75.57	9.97	2.39	C	2.27	33.48
388.4	12168	0.473	1.83E-04	0.188	0.806	75.57	1.98	2.42	C	2.59	18.59	273.7	12332	0.099	9.25E-05	0.192	0.808	75.57	7.61	2.39	C	2.57	27.60
384.2	12148	0.516	2.13E-04	0.188	0.806	75.57	1.83	2.42	C	2.38	15.46	305.0	12308	0.130	1.25E-04	0.191	0.808	75.57	6.19	2.39	C	2.47	22.43
367.8	12106	0.625	2.78E-04	0.187	0.806	75.57	1.52	2.43	C	1.99	17.83	368.4	12292	0.190	1.86E-04	0.191	0.808	75.57	4.50	2.40	C	2.42	17.30
133.4	12369	0.014	8.70E-05	0.194	0.809	75.57	21.52	2.38	C	1.46	62.47	428.0	12271	0.290	2.71E-04	0.191	0.807	75.57	3.11	2.40	C	2.29	13.32
237.3	12360	0.058	1.14E-04	0.193	0.809	75.57	11.11	2.39	C	2.11	27.11	454.0	12259	0.355	3.21E-04	0.191	0.807	75.57	2.58	2.41	C	2.20	12.20
297.3	12355	0.085	1.32E-04	0.193	0.809	75.57	8.53	2.39	C	2.40	28.00	469.6	12237	0.432	3.75E-04	0.190	0.807	75.57	2.16	2.41	C	2.08	11.74
343.3	12347	0.116	1.54E-04	0.193	0.809	75.57	6.74	2.39	C	2.53	2												

